C. Y. F. R. U.

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WIDE AWAKE

VOLUME X



BOSTON
D LOTHROP COMPANY
FRANKLIN AND HAWLEY STREETS



A YOUNG PRINCE OF COMMERCE.

By Selden R. Hopkins.

CHAPTER I.

A DARK DAWN.

WHEN the steamship *Encounter* went down at sea there were on board, among the passengers, a gentleman, his wife, and two small children, Vangrift by name.

Mr. Vangrift was a highly respectable merchant doing business in a Western city of note in the United States. His wife being in delicate health he was taking her to Europe under the advice of her physician. He was not a man of large means, but at home was doing a good business and gradually becoming prosperous. Like most country merchants in the United States almost his entire capital was invested in his business; that is, in his stock of goods and outstanding accounts. His limited means had not as yet enabled him to become the owner of his store-building. He had, however, made some payments on a comfortable home for his family. Mr. Vangrift had purchased the home property and received a deed for it, but being unable at the time to pay in full the purchase-price, he had given a mortgage as security for future payments.

[It is a common practice for people of limited means to buy real-estate in this way. Mortgages, like deeds, are placed on record and operate as security, as they prevent the purchaser from selling the property and giving a clear title to the new purchaser, until the debt for which the mortgage was made has been paid. Mortgages too, are not limited to this purpose. They may be, and often are, given to secure the payment of borrowed money or other indebtedness as well as for purchase money. They are security for money because the person holding a mortgage, in case the person who gave it fails to make payment as agreed, may recover possession and become the rightful owner of the property mortgaged. This, in law, is called "foreclosing a mortgage" and is accomplished through proceedings in court.]

When the doctor advised that Mrs. Vangrift should be taken to Europe, to remain there a year, it seemed at first to her husband that such a change in their home-affairs would be almost impossible. With a family of six children, in moderate circumstances, and with a business requiring his daily attention, it is not strange that such a change should appear to him so difficult.

But he was determined upon sparing no effort towards saving the life of one so precious. After mature reflection Mr. Vangrift decided upon plans for taking her to Europe. The four eldest children he would leave at home under the care of a very kind lady whom he knew would come and remain with them. The two little ones should go with their mother. He would accompany his wife to Europe, see her comfortably settled and return at the earliest possible moment.

Gathering together as much of his available funds as could be spared from his business the merchant took his wife and two youngest children to New York and there all embarked for Liverpool on the ill-fated vessel.

[Although the real meaning of the word *fund* is something put aside, or laid up for a specific purpose — as a sum of money especially put by for some direct object — yet in business-terms it also denotes money in its various forms. The "available funds" of a merchant are his cash in hand, or in bank, or possibly, such securities as he may readily convert into cash at any time.]

The four children left at home were, Albert a fine-looking, active and intelligent boy fourteen years of age; "Tama" as she was called, her full name being Tamora, a beautiful and charming girl of twelve; Mitty a happy good-natured and frolicsome boy about ten, and sweet little "Tossa," nicknamed from Atossa, who was yet in her seventh year. Little 'Tossa was named by her mamma who when the child was the tiniest kind of a little creature devoted much time, aside from her many duties, to reading Pope's beautiful poems. She found the name in these lines: *

> "But what are these to great Atossa's mind
> Scarce once herself but turns all womankind."

The name seemed so beautiful to her that she at once decided upon giving it to her little baby daughter.

Mr. Vangrift's business was entrusted to his faithful employee, Mr. William Colgert, who had been with him, as a clerk, many years and to whom he now gave a power-of-attorney.

[A power-of-attorney is a writing by which one person called the *principal* gives authority to another person called the *agent* to do and perform certain acts, which are properly the acts or business of the principal; as for example, signing the principal's name to important business or legal papers.] The authority given to Mr. Colgert was, no doubt, even more than to sign his employer's name, but also to buy and sell goods, to contract and pay debts, and, as the law usually provides, "such other needful and lawful acts" as would enable him to conduct the business without interference or interruption. In signing the name of his employer Mr. Colgert would write:

"CHARLES VANGRIFT,
by William Colgert, Attorney."

He executed this legal form that there should be no lack of proper authority for conducting the business. He carefully arranged for all details at the store and under Mr. Colgert's good supervision everything was passing along smoothly. The children soon dried their tears over the parting and with perfect affection among themselves had settled down to try and be as contented and happy as possible.

The Vangrifts had been absent about two weeks when the telegraph announced the loss of the steamship *Encounter* on which they had sailed.

This startling intelligence was kept from the children until special telegrams could be sent to New York for further particulars, in hopes there had been some error in the dispatches. But the terrible news was confirmed. "Lost off the coast of Africa with all on board. No tidings, as yet, that any were saved," was the response. The children were then told of what had happened. The news was softened with hopes that there was a possibility of a more favorable report; that they might yet learn of the safety of their father and mother. Every possible effort was made by friends to comfort them, but the scene was indescribably sorrowful. The pain and anguish of those four little hearts can scarcely be imagined.

A sudden transformation in the condition of affairs immediately took place at Mr. Vangrift's business establishment. Mr. Colgert had carefully closed and draped the doors in mourning. That surely was a sad enough proceeding, but it was by no means the worst of what very soon happened. The Judge of the Probate Court sent a note asking that Mr. Colgert should call at once at his office. To this summons Mr. Colgert very promptly responded. Meeting the Judge in the office adjoining the court-room Mr. Colgert was informed that he must do no further business in the name of Mr. Vangrift.

"According to reports," said the Judge, "which, under the circumstances, are the best authority we are able to get, Mr. Vangrift, the proprietor, has deceased through an accident at sea, therefore, as Judge of the Probate Court, it is my duty to see that the business is properly closed up in the interest of the heirs. Did Mr. Vangrift leave a will?" continued the Judge.

[A will, or as it is sometimes called, "will and testament," is a document in which a person directs what shall be done with his property in case of his death. It is drawn either by the person himself, his lawyer, or friend, and to be in legal form must be witnessed by competent persons. After the death of the person whose property and affairs it relates to, the will is taken to the Probate Court and there placed on record; and it is the duty of

* This name was a poetical title given by Pope to Sarah, Duchess of Marlborough, a great friend of Lady Mary Wortley Montagu, whom Pope calls "Sappho" in his *Moral Essays* Ep. II.

the court to see that the directions of the testator (as the one is called who makes a will) are faithfully carried out.]

"There is no will that I know of, Judge," answered Mr. Colgert.

"Then you must make diligent inquiry to ascertain if any will was left and cause a thorough search to be made in Mr. Vangrift's house to see if one cannot be found," were the instructions from the Judge.

"I will do that, sir," answered the clerk, "and report to you within a day or two, if that will be satisfactory."

"And you understand, Mr. Colgert," added the Judge, "that with Mr. Vangrift's death your authority to transact his business ceased. You are no longer his agent or attorney, and you cannot, therefore, legally represent him or attend to his business. If there are perishable goods or if there should be any business demanding immediate attention and which, if neglected, will result in loss to the estate, let me know and I will give authority for having it attended to. You must neither collect accounts nor pay bills — You understand, do you, Mr. Colgert?"

[The law says that where authority is given to the agent, as in this case, wholly for the benefit of the principal and the principal dies the authority is, from that fact, immediately revoked, or set aside. But any "acts done in good faith in discharge of the agent's duty, before knowledge of the death of his principal, and which inures to the benefit of the principal's estate, are binding upon his personal representatives."]

"I will follow your advice, Judge," said the gentleman who was now dismantled of his authority. "But we have no proof that Mr. Vangrift is dead. We only know that the ship was lost and that there are no tidings of any on board having been saved, yet that is not to say but what some may have been rescued in some way."

"That will do very well for an argument," said the Judge, "but it will hardly hold good in law. Although there is no positive proof, in this case, that your principal is dead, yet the best obtainable information says so, and as agent you are bound to believe it to be true. It was that belief which prompted you to drape those doors in mourning. I think without doubt, it would be said, in law, that information of his death has come to your knowledge, and you are therefore bound to so consider it. If no harm will result from delay I shall be quite willing to wait a reasonable time before taking any active measures towards administering upon the estate. Certainly we all hope, as long as hope is possible, that the facts are not as bad as we now believe them to be. It is a very sad affair."

A thorough search was made to see if a will could be found, but none was discovered. The fact that Mr. Vangrift had said nothing about such a thing before he went away was almost conclusive evidence to Mr. Colgert that no will had been made. This was a most unfortunate circumstance. As no will had been made it would be left with the Judge of the Probate Court to appoint an administrator and a guardian for the children. He would also appoint an attorney, or allow the administrator to appoint one for his assistance and council. The business would be closed up at a great sacrifice and the children be left with far less than they by right ought to receive from their father's estate.

Here was the instance of a man wise and careful in business but who, over-confident of life, had neglected a most important consideration for his family. He was excellent in management, keen and active in every detail of his shop, prompt and reliable in every engagement, but, like many others, in this essential particular he had fatally delayed. Before leaving home Mr. Vangrift should have carefully prepared a will stating who he desired should conduct his affairs and settle up his estate in case of his death, and who he preferred to become guardian for his children.

He could have provided a way for his son, with the aid and assistance of his faithful employee, to continue the business, and thus have left a sure support for those who were dependent upon him. As he failed to do this, the whole tide of affairs must change.

Mr. Colgert was directed to step aside. The public administrator came in and took possession of the business. He also immediately took charge of all the property and effects of the lost merchant. The goods at the store were inventoried and soon after disposed of at a great loss.

[An inventory is a list of goods or property giving the number and name of each article with price or value carried out. It is commonly used

in trade by merchants and others to designate a catalogue of goods on hand at any particular time. "Taking account of stock" is a term equivalent to "taking an inventory." The word is particularly applied, in law, to a schedule of a deceased person's estate, upon which are enumerated all articles or species and classes of property. It is more directly applicable to the personal estate of a deceased person.]

The money was held by the administrator subject to the order of the court. The home which was mortgaged to the person from whom it had been purchased, must be disposed of. By arrangement it went back to the mortgagee, he paying over to the administrator only a small part of the money Mr. Vangrift had paid on the property.

[The mortgagee is the person who holds the mortgage, the mortgagor the one who makes it.]

The children were permitted to remain in the house where they were until the estate could be settled.

Before any settlement could be made all the "debts, dues and demands" against the deceased merchant must be paid. The lawyer must have his compensation; the administrator his commissions and numerous expenses; the court must have its fees, and the orphan children — well, if there was anything left they could have that. But how long must they wait to know whether or not anything was to be left? The law makes no great haste in such matters, but good opportunities are offered for delay if such be the wish of its agents and officers. Those children may be in anxious suspense, but the workings of a cumbersome court, the notions of an easy-going judge, and the time of an erratic administrator, are considerations to be most respected. For the present the children will be supplied with bare necessities, and must do their mourning with a patient resignation. And so the little Vangrifts did.

The terrible shock caused by the first sad news wore gradually away to a resigned melancholy. The little hearts were still sorely afflicted, but at times they were apparently forgetful of their troubles. One day when they were all in cheerful state, and while trying with patience to await the final decision of the court, Albert called the little ones together, as he said, "for a conference." He had been studying over their situation and trying to decide in his own mind what would be best for them to do. Now he wanted to try and learn from each what they thought would most please them.

The brave boy knew that his mother had a sister living in Massachusetts. She was the only relative of which he had any knowledge, and he had been studying over the question of the four going to her, and of asking the Judge to appoint her their guardian. He knew her only from what his mother had told him about her, but he had formed a favorable opinion, and he thought now, if they could only be with some one so nearly related it would be a wise thing to bring about.

"The Judge," said the boy, "has told Mr. Colgert to ask *us* if we have any choice about who should be appointed our guardian and to find out if we have any relatives who would be willing to take care of us, and — "

The boy stopped for the little listeners had broken out in a good hard cry and were sobbing sorrowfully. He wiped the tears from his own eyes and going to them gave them a warm brotherly kiss and bade them be cheerful for he had something very nice to propose.

Little 'Tossa with her beautiful curls of brown hair glistening in the sunshine, and her large blue eyes full of love and confidence, had ceased her sobbing, and as though some new thought had pierced her childish brain threw up her little hand and cried out:

"Oh, Bertie! I most forgot. I dreamed something good last night, and I don't believe mamma and papa is dead any more!"

"What was it, 'Tossa?" cried Tama and Matty, and Albert looked into little 'Tossa's face to learn what she had to say.

"Oh! I dreamed a nice long dream that mamma and papa came home, and bringed us whole lots of presents and everything, and they loved us and kissed us and was glad to get home, and they wasn't hurt, only just a little, but mamma's clothes was wet."

(TO BE CONTINUED.)

WONDER-WINGS, MELLANGONGS, COLOSSI, AND OTHERS.

By C. F. Holder.

I.

WONDERFUL FLIERS.



THE DRACO VOLENS.

SOME astronomers assume that the planet Mars is inhabited, there being many reasons for believing this, and that owing to the difference in the force of gravity its people can jump over a house as easily as we make an ordinary leap; hence it is supposed that life in the air is the rule on Mars, and that the majority of forms there are provided with wings, or else with some substitute adapting them to what would appear to us a very curious condition of things.

Some of the animals which people our own planet have hollow bones, and numerous air-sacs, and the weight of their bodies is reduced to the minimum, so that they leap into the air with ease, their fore-arms being modified to suit aerial progress. Such are our birds; and there are many other animals which to a greater or less degree are fliers, though moving by different means.

Some of the earliest and most remarkable fliers were not birds, but reptiles; huge creatures, stupendous and uncanny. It has been known for many years that such fliers existed in the early geologic days; but only within a short time has it been understood that they attained to such gigantic dimensions. Skeletons of Pterodactyl, as these flying reptiles were called, are found in many European collections, and terrible creatures they must have been, their jaws armed with sharp teeth; but through the exertions of Professor Marsh, of Yale College, vast numbers of allied forms have been discovered in our Western country, which range in size from a snipe up to gigantic fliers having a spread of wings twenty-two feet! These aerial creatures differed from the Old World forms in not possessing teeth; they probably relied upon their immense size to terrify their enemies.

The scene in North America in these days, can perhaps be imagined. Flocks of these strange bat-like animals with long extended jaws, and enormous leathery wings gathered about the lakes of the time and undoubtedly dashed into the clear waters in search of prey. When a flock left their roosts and soared away, they must have darkened the earth and terrified the human hunter, did he then exist. A dozen, each with a spread of twenty-two feet, flying together, must have presented a formidable spectacle, and few animals then living but would have been alarmed at their approach.

While the Old World can boast of no flier as large as our Pteranodon, it had some which were more remarkable in structure, and more grotesque in appearance. The Rhamphorhynchus, which stands at the head, was discovered some years ago in the slates of Germany, and is remarkable in being the only specimen ever found that shows perfectly preserved the membrane of the wing. The animal possibly died and fell into the water, thus becoming covered with the material which in intervening ages turned to slate and formed its tomb. Professor Marsh secured the specimen for Yale College, and it stands to-day one of the most wonderful fliers ever discovered. This animal had not only the long jaws of the Pterodactyls, and the large wings, like those of a bat, but the hind legs were connected by a membrane as in these animals, and the tail, instead of being short, was nearly if not quite as long as the entire body, terminating at its tip in a veritable rudder, with which this living craft guided itself through the air. The tail, separated from the body and taken individu-

ally, would look like an ordinary canoe paddle, with the end of the blade rounded. The membrane of this rudder was supported by spine-like bones, extending on either side. Its appearance in the air must have been exceedingly curious. There are no reptiles of this kind now in existence; the only forms resembling them being the bats, which belong to the mammals — a totally different class.

One of the most remarkable and interesting of the mammalial fliers is the flying fox, so common in some of the islands of the extreme East. They have a fox-like head, sharp teeth which they use in eating fruit, and are such great pests that in some places nets have to be placed over fruit-trees. These creatures hang to the limbs of trees like bats, and in this position would be taken by strangers for the fruit of the tree, so much do they resemble it.

From these animals which have a wing-like membrane stretched from elongated fingers, we may pass to a group which move through the air by means of a parachute-like arrangement — a membrane which hangs loosely when the animal is at rest, but when the limbs are extended, forms a veritable parachute, connecting the space from the wrist of the fore-limbs to the ankle of the hind ones. Our common flying squirrel is a familiar example, and in the East there are many large and interesting forms illustrating this curious modification, which adapts the little creatures to a semi-aerial life.

The motion of these so-called flying squirrels is not true flight, but rather the action of a parachute, as they cannot raise themselves in mid-air, and all the movement is a downward one. They ascend to the tops of trees, and boldly hurl themselves into space, instinctively holding out the claws which spreads the membrane parachute to the breeze. Thus buoyed up they glide downward, then up a few feet, alighting upon the tree which was the object of the flight; then quickly mounting it to again hurl themselves down. In this way long journeys are made with remarkable celerity, and in some of the large Eastern forms flights of one hundred feet and more have been noticed.

A very remarkable flier is found in the islands of the East Indian archipelago, and is known as the flying lemur or galeopithecus. Not only are its limbs connected by a membrane, but a part of the tail is also included, as in the bats. The side membranes are exceedingly large, and the animal can take a long leap from tree to tree, not only passing safely, but also carrying its little ones, which cling to it, and when the mother walks about find ample concealment in the folds.

Very similar in its methods of flight is the beautiful lizard, called the *Draco volans*, or flying draco.

This charming little creature, which resembles in the air some brilliant butterfly or gorgeous insect of the East, is only about a foot long, and has a web-like arrangement on each side which is boomed out when occasion requires, or supported by bones called false ribs. Like the flying squirrel it darts to the summit of lofty trees, and boldly launches itself, sailing gently down, supported by the curious parachutes which so act against gravity that it generally alights at the selected place with the greatest ease. The parachutes are not in any sense used as wings; that is, there is no motion up and down, though the draco takes extraordinary leaps into the air after insect prey.

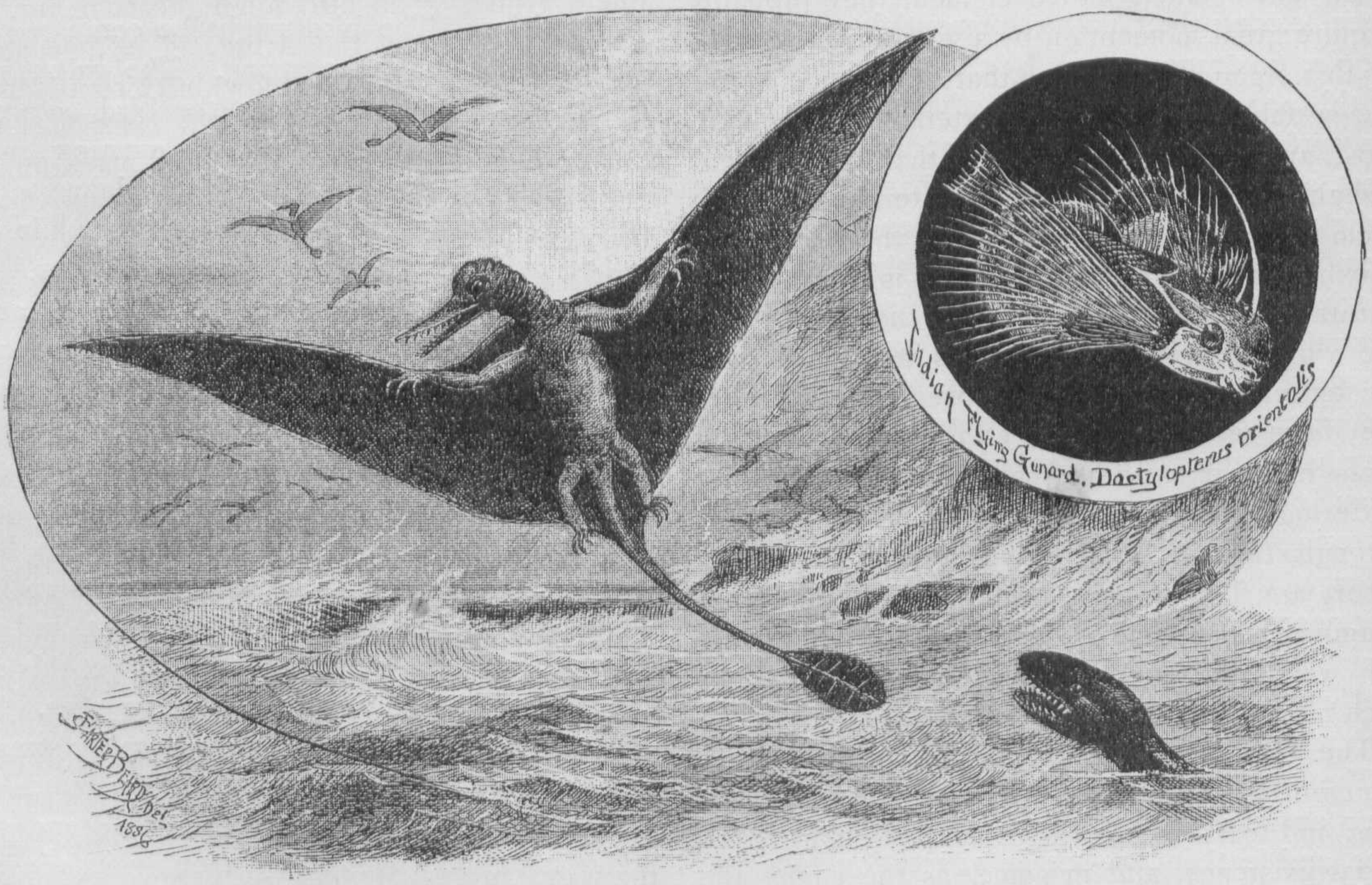
The appearance of a group of these lizards moving through the air is indescribably brilliant. Their color is a rich pale blue on the back, other parts being a bluish-gray, while the back and tail are ornamented with many transverse dark bands. The so-called wings, which are of course very prominent when the animal is moving, are marked in black, white and brown, and bordered with a white line. Many different species are known, some of them being disagreeable in their aspect; and undoubtedly from them the old writers obtained their inspiration when describing the dragons which the brave knight had to conquer before he released the beautiful maiden.

Among the swimming birds we notice that the toes are connected by a web which presents a broad flat surface to the water, open only when the foot is pushed back. It would not do to assume from this that all animals with webbed toes were swimmers, as we find in the island of Borneo a little tree-toad, whose toes are connected by webs, so that each foot is a parachute, supporting the creature in its flights from tree to tree. This curious flier was discovered by the naturalist Wallace. He was walking through the forest when one of his men noticed a curious object sailing down through the air and secured it, when the naturalist found to his amazement that it was a veritable flying-toad, which used its webbed feet as wings to transport itself from one tree to an-

other. This animal, though a small delicate creature, has a very long name, *Rhacophorus volans.*

Some years ago a party of gentlemen were sitting in the cabin of a vessel bound for Cuba. They had passed Cape Florida, and were speeding through the warm waters of the Gulf Stream, which finds an outlet between Cuba and Key West. The party were gathered about a table, and one of them reading a paper, when with a crash and a splutter a strange body darted through it, passing by his face, and fell with a thud upon the floor. It is needless to say that the gentlemen started to their feet in astonishment, and it was not lessened when the victim held up his torn paper, and a moment later picked up from the floor a fish about six inches long, with long pectoral or side fins, and a hard-armored head. The fish was the well-known flying gurnard, common in Southern seas, and had either been attracted by the light, or had accidentally dashed through the open port.

I have often watched these beautiful creatures darting over the waters of the Mexican Gulf. Particularly where the great patches of sea-weed congregate they are numerous, and as they are richly colored, blue, purple, red, and yellow, and marbled with striking spots and bands of darker hue, they are the veritable birds of this ocean summerland. We do not wonder that they can fly when we examine their fins, as the side ones are so elongated that they are comparatively useless in the water, the tail being the motor there. But when alarmed, or in play, they leap from the water, the wing-like fins are spread, and they dart along, using them as parachutes, and attaining remarkable distances. There are several kinds of these fliers, one quite common about New York harbor, probably finding farther east a cousinship with the quaint and homely gurnards of the New England coast.



RESTORATION OF THE EXTINCT RHAMPHORHYNCHUS, FROM SKELETON IN YALE COLLEGE MUSEUM.

The several species of flying fishes proper, Exocetus, are even more remarkable, and take long flights, some that I have observed being certainly one eighth of a mile. They are frequently seen bounding from the waves in schools, and sometimes the wind takes them and they are hurled aboard ships, striking the sails, and falling to the deck. They are beautiful creatures, though different from the gurnards. The latter resembles some gorgeous insect, in their gaudy dress and metallic lustre, while the exocetus has a garb of

shining silver, with a bluish tint upon the back, and the extended wings or pectoral fins, which are without color, look like lace.

No question to-day is discussed more widely than that as to whether the flying fish is an actual flier or not, and an army of observers is arrayed on either side. I have seen great numbers of them in Southern waters, and consider that their flight is comparable to that of other animals which use parachutes. The specimens which I have observed in confinement never moved the side fins, or so-called wings, under water, the tail being the motive power in every movement; and I think that when leaving their native element they probably acquire great momentum by a vigorous movement of this organ, and I notice that when once above the surface, the broad fins, extended to their utmost, are held at such an angle that they present a slight resistance, the rush of air tending to press them up, and I conclude that when the momentum is exhausted this upward pressure is relaxed, and naturally the fish falls back into the sea. When the wind is favorable the flights, as I have said, are extremely long. Many observers state that they have seen the fins moved up and down; but I am inclined to think that this was simply the fluttering of the wings as they moved quickly through the air. The advocates of this flying theory are, I think, as a rule, those who have not examined the muscular development of the flying fish which seems totally inadequate to produce such movement.

The true fliers are, of course, the birds. In their entire structure, the hollow bones, the air-sacs, and feathers, we see an adaptation to a true aerial existence, and in some, as the eagle, the condor and others, the power of sustained flight reaches its greatest perfection. The birds which spend most of the time in the air make the least exertion. In other words, they depend almost entirely upon soaring, and do not expend their strength upon a continued flapping of the wings. I noticed this particularly among the mountains in Southern California where buzzards are common, and I have seen these birds under the glass and near at hand moving about, rising and falling, now swooping into the cañons, then rising to great heights by circling, without a single movement of the wing, the fore-limbs being perfectly rigid. This was most successful when there was a breeze; but it seemed possible at any time, and it was rarely that a buzzard could be seen moving its wings unless near the ground; the motion while in the air being produced by pitching down or turning the body to either side. I have seen the man-of-war birds remain motionless in the air, four hundred feet up, during a gale of wind, and with wings outstretched they would literally rest on the wind; remaining in the same position a long time, there evidently being an enjoyment in it, their only movement as observed from the top of a lighthouse, over which they were poising, being an occasional pitching down and subsequent rising. The bird might be compared to a kite; gravity being the string. The gale strikes its breast, and tends to blow the bird before it; but by pitching down slightly it overcomes this, and so remains stationary. This explanation may not be accepted by my mathematical or philosophical readers, but there seems to be no other.

Many young people would probably be astonished if told that air is not the only element in which flying can be practised. Flying under water is not only a possibility but a fact, and the water ouzel is one of the most interesting of all birds in this respect. Most of the water birds are fitted with appliances adapting them for a marine life; but the water ouzel seems to have been neglected, as it has no webbed feet, and is as little prepared for a dive as a robin; yet this does not deter it from taking submarine voyages. It is generally found along the banks of rocky streams, and, curiously enough, seems to prefer to seek its food under water, boldly plunging in; and once under it actually flies along, moving its wings in the water just as it does in the air. In this way the little flier proceeds along the bottom, now flying, now walking, hunting for the worms and shells which constitute its food.

The penguins have rudimentary wings which appear like fins, and are used as such; the illusion being still farther carried out by the feathers which are so small that they might readily pass for the scales of fishes. These birds spend a greater part of their time in the ocean, and in their movements under water greatly resemble fishes. They cannot fly in the air, but they have wings perfectly adapted for submarine flying, and assisted by their powerful webbed feet they dart along with surprising speed.

SOME SUCCESSFUL WOMEN.

By Sarah K. Bolton.

I.

JULIET CORSON.

IN the winter of 1884, the Cleveland Educational Bureau, which was organized to give the best entertainment and instruction to the people at the lowest possible prices, decided to have a series of lectures on cooking, in addition to its regular course. We hoped that some of the women of the city, especially the wives of working men, would appreciate and appropriate this special instruction.

Who should be engaged to give the lessons? Naturally we turned to Miss Juliet Corson, Superintendent of the New York School of Cookery.

At the hour appointed, on Saturday afternoon, what was our amazement to find three thousand persons present! On the platform a gas stove had been arranged, while a man in white apron stood before a butcher's block ready to cut his quarter of beef as the teacher might direct.

Miss Corson, with sunny face and pleasant voice, mixed her bread or prepared her meat as she talked. A dozen newspaper reporters were at their tables, while ladies all over the vast audience were taking notes, or writing receipts, as she gave them. The men among her listeners seemed equally interested with the women; and why not, since good food, like good air, is vital to one who would do able and telling work in the world?

Women were present from the most elegant homes of the city, and from the plainest, all equally interested. Each newspaper gave from one to three columns daily of Miss Corson's sensible talks about food and health and of her directions for making soup, tea and coffee, bread and pastry; and we trust that the city was helped considerably in the matters of digestion, economy, comfort, and good sense. I became myself deeply interested in Miss Corson; I found her highly educated, refined in manner, one who dignified and elevated labor, and who had gained her success by her own exertions.

Born in 1842, in a Boston suburb, Mt. Pleasant, she lived and played in that shady retreat till the family moved to New York, when she was six years old. The mother was a quiet, cultivated woman; the father was absorbed in his wholesale commission business.

The child spent most of her time with the family of her uncle, Dr. Alfred Upham, brother of the writer on Mental Philosophy. Under the loving care of two of her mother's sisters, and her uncle's guidance, she studied Latin and Greek history and



JULIET CORSON.

classical poetry. She read daily in Mr. Upham's large library, and was quite content to be his little companion book-worm; for until she was almost twelve years of age, nearly ten months of every year were spent on the sofa or the bed; nevertheless the little invalid was amassing great riches from her books, and doubtless this early study prepared her mind for her broad work in the future.

When Juliet was eighteen, the gentle mother

died, and, after a time, the father brought a new wife to the home. As he was a man of comfortable means, there was enough for all, but as the brothers had gone out into life for themselves, the new inmate requested the daughter to do the same. Unused to labor, still frail in health, what could she find to do? Yet do not commiserate her. But for being forced to earn her living, Miss Corson would probably have done little for the world.

Miss Elizabeth Power, a member of the editorial staff of the *New York Times*, then under the management of Henry Raymond, had been instrumental in founding a library for working-girls, in a large room in the New York University building. Young Mrs. Upham was interested in this work. Could not her cousin be useful here as librarian? Only a small salary could be paid, four dollars a week, but this the eager Boston girl was glad to obtain.

"It seemed a gold mine," she once said to me; but she little knew how quickly four dollars would vanish when room-rent, board-bills and washing-bills were to be paid out of it. Often by the time the week was half through, she was out of money, and then she lived by means of pitiful economies. She says laughingly now that she would often have been glad of one of the fifteen-cent dinners she devised later. Finally it was arranged by the kind-hearted founder of the Woman's Library that she should sleep there on a sofa in the library, and thus save a portion of her expenses; the library's finances did not warrant an increase of salary. She made a little money, too, now and then, by a poem or a sketch in the newspapers.

At last she became acquainted with several of the staff of the *Leader*, of which Oakey Hall and Harry Clapp were then editors, and the arrangement was made that she should write one first-page article each week, upon the new books, pictures, music, and matters of interest to women; for this column she received five dollars. This seemed another "gold mine," and life actually looked luxurious with nine dollars a week; four hundred sixty-eight a year! Presently Dr. Sears, editor of the *National Quarterly Review*, wished a half-yearly index made, and this she did for him accurately. Then he gave her points of articles he desired, told her to make researches and write, "and he would see what sort of stuff there was in her." The young librarian was tired and worn, but glad enough to earn the money and, moreover, very proud of writing for the *Quarterly*, on the staff of which she was the only woman-writer.

In 1873 some ladies in New York started a noble charity. There were thousands of young women who needed to earn a living, but, unlike their brothers, they had been taught neither profession nor trade. Probably their mothers reasoned that they would marry early, and therefore a trade would be useless; but knowledge never remains useless to man or woman, married or unmarried. The free training-schools for these young women, first opened in Miss Corson's own home, were soon located in a large room in Wheeler and Wilson's sewing-machine building, and this company, and others, loaned scores of machines, free of charge, for applicants to learn upon. In nine months over one thousand women had been taught thus to sew, and situations had been obtained for three fourths of them. Book-keeping, proof-reading, and shorthand, with which Miss Corson's avocations had made her familiar, were also taught free of charge.

Early in the spring of 1874, it was decided to also teach domestic service. A larger house was taken, where the basement could be used for a cooking-school, and meals could be provided at cost to working-girls employed in neighboring stores. The upper rooms were turned into a dormitory, for many young women came hither with no money to pay for either shelter or food. A laundry was soon added.

When this cooking-school was started, being the first in the country, no one knew just what was specially best to be done. As Juliet Corson was the secretary of the society — no wonder she was interested in working-girls from her own trying experiences — she wrote to the South Kensington Cooking-School in London; but it proved that they too were just beginning and could give little assistance. She then decided to obtain the best books on cookery, in the French and German languages, and the result was that admiring the thoroughness of the German and the delicacy of the French, she combined the ideas and reasons of their methods into a philosophy of her own. Next a trained French cook was employed who could carefully carry out Miss Corson's directions as she gave the lesson before the class. At first she was nervous as she stood before her pupils; but this timidity was overcome as her interest in her work increased. For several years she carried forward this department.

In 1876, several wealthy ladies said to her, "Miss Corson, can't you open a cookery school at your home? *We* wish to come and learn, as well as the cooks."

So, in St. Mark's Place, near Cooper Institute, the famous New York Cooking-School was opened. From the first it was a success; over one thousand persons came each year for a course of lessons. Those in good circumstances paid ten dollars for twelve lessons; wives and daughters of workingmen, fifty cents a lesson; while, says Miss Corson, "I never have let a person go who wanted to learn, and had no money. I gave to all what I could teach." But how different these bright years of well-paid work from the four-dollars-a-week life in the library!

In 1877, on account of the railroad strikes and the unsettled condition of business, there was much suffering. Miss Corson well knew what poverty brought to women and children, especially when poverty came because husbands and fathers were out of work. She believed rightly that if she could show the poor how to live comfortably on a small income, she would be conferring a blessing.

It was then that she prepared that little book called, *Fifteen-Cent Dinners for Workingmen's Families*. She had tested the receipts in her own family of five adults, and found that while delicacies could not be provided, plain substantial food could be, if the teachings of the book were implicitly followed. Upon its completion, she offered the book to any Charitable Society which would print and give away fifty thousand copies, but no organization was found willing to undertake this beneficence. Then Miss Corson said, "I will do it myself," though she did not know where the money that was necessary for the work, would come from. When the book was ready, she announced through the leading papers that all persons who called at her house could have the book free. Before seven o'clock the next morning, her hall was filled with people waiting to receive the little pamphlet.

So wide-spread was the demand for it, that calls came even from India, China, Australia and South America. Countless letters have reached her from all parts of the world concerning this book. Some Socialists ardently blamed her for writing it, because, they said, "If capitalists think we can live on fifteen-cent dinners, they will lower our wages;" but generally the poor felt grateful for this assistance in making a dollar go as far as possible.

The six thousand dollars eventually spent in circulating the book, came from Miss Corson's own hard work, with the exception of one hundred dollars, which was given to her one day at the school by Mrs. Robert L. Stuart, with the remark, "Do what you wish with this, Miss Corson." As all that came then was grist for *Fifteen-Cent Dinners*, this hundred dollars went into the mill.

Almost immediately all over the country the press and people were talking about the novel little dinner-book. The Baltimore *Daily News* gave out over its counters one thousand copies in less than a week to meet the individual calls of working-people. The Philadelphia *Record* re-published it entire in its columns. The New York *Herald* said:

> When we consider that the breakfast of many a laboring man's family in these times (of the railroad strikes in 1877) frequently consists of bread alone, we cannot give too much praise to the book that teaches how to make savory and healthful dishes at a cost of from ten to fifteen cents. . . . There is no use in extending our arguments: the book speaks for itself and needs no vindication: for its earnest author, she has nothing to make: indeed, for charity's sake, she is a great loser. The interest we have is in the pamphlet, which has secured wide attention, and which is valuable for the very poor. Economy is not a crime. If a poor man can get more from ten cents than he is used to getting he is better off.

The letters of the working-people themselves were pathetic, because they testified how the poor struggle to live, and how warm their hearts are toward those who aid them. Here are extracts:

> If I understand the papers that you help the poor by letting them have a cook-book free of charge, that they may learn the way to cook for themselves and live cheap by the good advice therein, pray send one to me, for I am greatly in need of something of that sort. If I was to write for all the poor people in E —— that would be glad of a chance to get a book it would take two dozen to supply them, for we are in hard luck for the last four years. Very little money. Very little work at any price. And what is worse than all, winter is coming. Then all work stops. And the store-keepers stop trusting us. So you see we are very much in need of a book to teach us how to cook what little we can get in a proper way.

> Kind friend Juliet, for the last six months I have not earned $1.50 a day. Times are very hard. There are plenty in our factory no better off than myself, with five to seven in a family. Please send us books.

MY DEAR MADAM: I read in the Sunday papers something of more importance than I ever read in my life, under the head of "The Food Question." My wife read it, and was very anxious to know how it could be done. I work in a shop where we are getting 80 cents to $1.44 a day; there are about 90 men working there. I would suggest that you send us each a copy, that we may learn to feed ourselves economically. If any person with an intelligent eye would walk through our shops and take notice of our lean, haggard, worn-out faces and bodies, he would come to the conclusion we need some advice.

There is five of us women and a little boy, and I earn a dollar a day. I sew lace. But my eyes are poor, and it is hard. *We don't have much to eat many days.* We want your book so bad.

Besides this little book for the poor, Miss Corson has given lessons to the workingwomen of the Five Points House of Industry, the 7th Ave. Chapel, the Episcopal Orphan Home, the Alexander, the Holy Trinity, and Olivet Chapels, New York, Dr. Vincent's Mission, Dr. Hall's Mission Class, the Wilson Mission, the Sheltering Arms, Cooper Institute, the Workingmen's School, the Brooklyn Industrial Restaurant, the Soldiers Orphan's Home, and latest at St. Augustine's Chapel of Trinity Parish, New York.

She had now become so widely known that requests came from many cities asking her to give courses of cooking-lessons and to help open cooking-schools. In Montreal, she gave the first lessons in cooking ever given in public schools, to the girls in the high-school; she also gave a course before the Ladies' Educational Association, and evening classes to the wives of artisans. In Concord, Northampton, Hartford, Pittsfield, Peoria, Minneapolis, Baltimore, Chicago, Washington, Syracuse, Plainfield, Brooklyn, where she gave courses, the working-people had free lessons. Nurses were taught cookery for the sick at the State Charity Hospital, the Brooklyn City and Maternity Hospitals, and at the New York, Brooklyn and Washington Training Schools for Nurses.

Before 1878 she had prepared a *Text-book and Housekeeper's Guide*, which has now gone through six editions, and this was at once used in the Montreal Cooking-School. This book also contains a "Dietary for Schools," showing what food and beverages students need, and most useful suggestions are given about early breakfasts and mid-day dinners. This "Dietary" was prepared at the request of Hon. John Eaton, U. S. Commissioner of Education, and ordered published by the Secretary of the Interior.

In 1878 Miss Corson's well-known *Cooking Manual* was published. It is one of the best books possible to put into the hands of a young housekeeper. Over eight thousand copies have been sold. *Meals for the Million*, a small book, for twenty and thirty cents, has had an immense sale. After this her *Family Cook Book* was published in one of the cheap libraries, and has gone into thousands of homes. She has recently completed *Practical American Cookery and Household Management*, and is also preparing two books to be published by the Harpers, one of which is upon *Sanitary Living*. This she means to make "the work of her life." These later books are more carefully written than were the others in time stolen from her work as teacher and lecturer, often after midnight to meet demands for copy. She is also preparing a cook-book for working-people, to be sold at about the cost of publication.

Has not this been a busy life? And nearly all her important public work has been done in the last ten years, done too with frail health, and often in much pain of body, and literally under the doctors' sentence of death.

The lesson of this life is for all women. Miss Corson would undoubtedly have succeeded in other directions, with the putting-forth of the same energy and ability. A Christmas story of hers written for one of her child favorites, the daughter of a neighbor of Thomas Nast, has been promised illustration by that versatile genius; she is somewhat of an artist herself, and an enthusiastic lover of music, an ardent student of the harmonic mysteries of Wagner.

And now unable to lecture on account of ill health, her physical inactivity tends to mental activity, and permits her to put her experience into written words which can reach thousands, where her spoken words could reach but hundreds. "This is the silver lining, I suppose," she says cheerfully, and she adds:

If I am laying up any reward for myself I hope it may come in the shape of strength to complete my work, as yet only outlined.

WAYS TO DO THINGS.

By Mrs. Jessie Benton Fremont.

L.

BABY'S SHOE.

[" A," sole and lower sides of shoe. " B," front of shoe. " C," heel and upper sides.

Join 1 and 1, " A," glove-seam, to make back of heel; join 2 and 2, " A " to 3 " A " to shape heel; gather from 4 to 4 " A," in loose whip gathers. Then join 5 and 5 " A " to 5 and 5 " B," making smooth joins along to 4 and 4 " A "; then collect gathers and complete the join between 4 and 4. Then join 6 and 6, " C," to 5 and 5, " A " and " B "; remainder of " C " folds and laps under " B " [not over as in diagram], which stands up, overlapping " C." The string passes through slits 7 and 7, " C," tying snugly over " B."

The light outline of diagrams gives full working size for girl one year old; the heavy outline gives size for boy of same age.]

HAVE you not all heard the crying, and seen the ineffectual angry attempts of a baby to free itself from the unelastic fixed restraint of its first shoe? A beautifully-shaped buttoned-boot — a miniature of its mother's walking-boot — coming well above the poor tender-boned ankle and even made with a suggestion of a heel!

Have you ever seen these modern boots taken off? and seen the violet-pink flesh and felt the clammy cold skin of impeded circulation? Have you seen the same feet, reviving after a little rubbing and soothing warmth had restored their natural condition — until suddenly Baby feels itself again; and the supple little creature makes sure of an old pleasure by putting his toe into its mouth? Even a worse shoe I see now advertised: "The Corset Shoe *to form the ankle!*" Those gelatinous bones, that tender flesh, are best formed by the simple methods nature provides. Judicious *letting alone*, and all the motion and restlessness a baby can give way to, are its right.

The shoeing of cavalry horses, and proper shoes for infantry, determine the full efficiency of soldiers. There is a whole literature on this; the best thought of military men has been given to it, in England more especially. While you know how the recurring operation of shoeing a race-horse concentrates the personal care of owner and trainer and special skilled farrier.

A country baby *may* go without any shoe in warm weather, and very loose ones after. A city baby is sacrificed to Mrs. Grundy, and its tightly buttoned little black boots hang numbed and chilled as nurse carries it. It knows better than to try even to toddle on those balls of discomfort. Either on nurse's arm, or strapped down in its carriage, the feet cannot be properly warm in those unaccommodating boots. From cold feet to headache, to disturbed stomach, to irritated nerves and that " malaise " which the plantation people called " *a misery all over*," is a quick process.

And there is worse. For any easy use this shoe practically ends the leg at the top button. The hinge-like joint which works the heel is too securely imprisoned to work forward freely. Its *lateral* movement leads to the danger of the child's *avoiding the use of its foot and ankle;* and as nature pityingly accommodates itself to wrong conditions, you will see a baby acquire strange dexterity in queer sidewise motions, and make the leg below the knee and the knee itself do duty for the ankle and the flexible toes. From this follow many lasting forms of hurt. And, at once, come falls and awkward habits.

In my limited province I came to the rescue with an adaptation of the Indian moccason. Making them of chamois leather for the very first shoe, at six and eight months; then getting a thicker but always *pliable* skin, dogskin or buckskin, and in time adding a sole of morocco. When the adventurous two-year-olds *would* make off to the stable and chicken yard, and find that pebbles and sticks and chestnut-burrs and frozen ground changed their mirth to wailing, then cricket shoes were substituted.

Neighbors and visitors have been shocked, and argued that these moccasons would " leave their ankles weak!" It was in vain to point out our erect swift Indians — all the strong field-hands of the South who never had shoes in childhood —

and the Arabs, and the lithe and graceful Hindu, and that marvel of endurance and agile strength, the Zulu. And the barefoot lads of all countries. What "shapes" all these ankles?

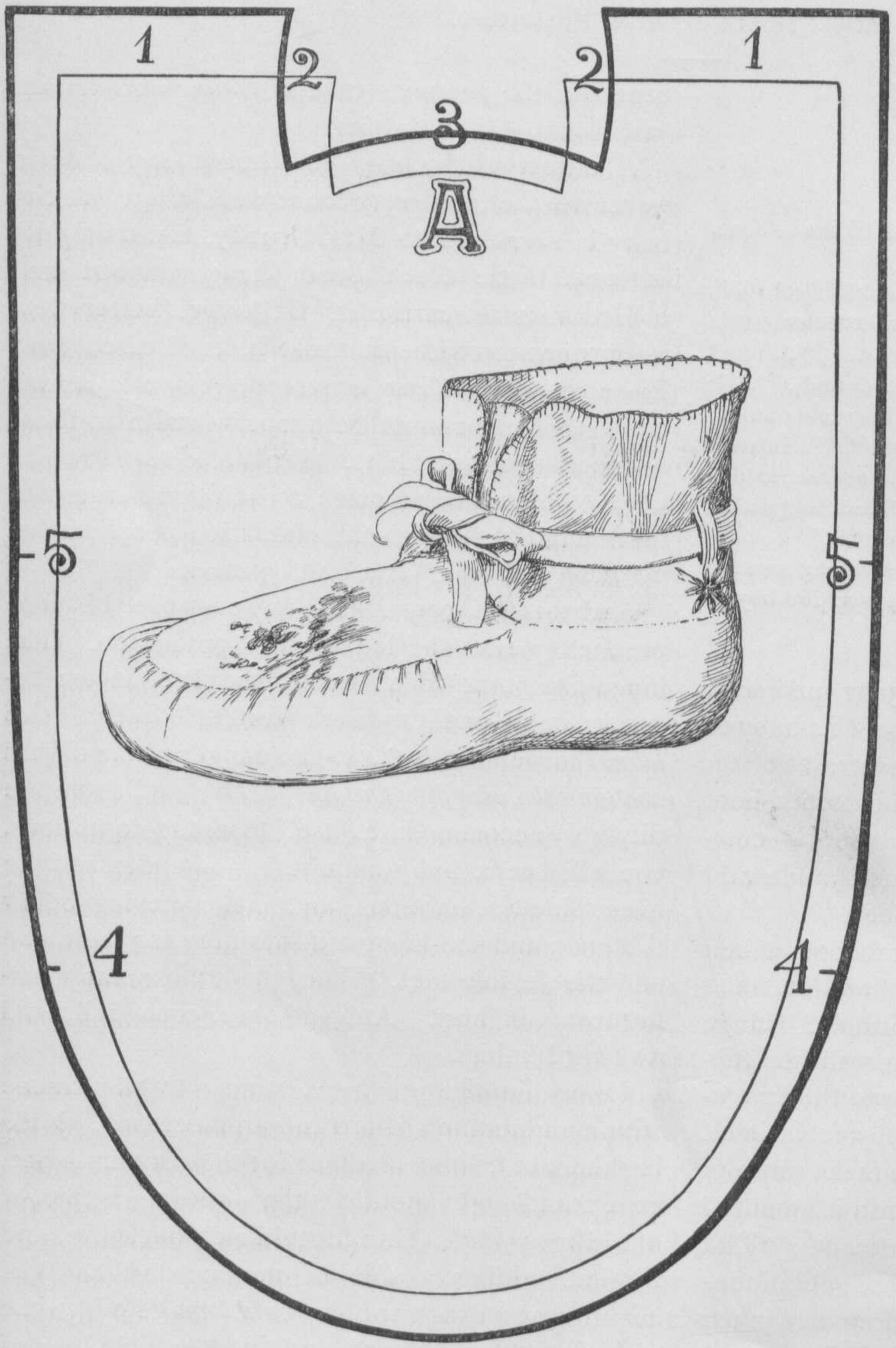


FIG. A.

I am ashamed I never properly noticed this evil until it touched my "Small-Jack." His discomfort, his touching looks and gestures of appeal against the hampering of his squirrel-like activity, finally his recognition that he was helpless, and his way of meeting the inevitable, quite "broke me up."

Finding that his shoes were constantly put back on his kicking feet and that he was alone against the crowd, he just calmly sat him down and would not move at all. The cat, the coal-scuttle, his india rubber bath-tub, all his most desired and forbidden delights were vainly offered him. No. With the stoical resignation of an Indian he ceased to make vain attempts, but sat quite still on the floor, looking at those two new black shoes.

Coming overland I had brought from Cheyenne some little moccasons, because they were pretty and "baby." We put these on him and lo! a transformation — the little toes worked cautiously and found themselves free! Jack's face was lighting up with courage; with a swift dart he scuttled off and found he *could* begin his busy mischief.

Then and there I was promoted to the post I have filled since for Jack and his sisters of "Shoemaker to the Babies." Many and many pairs of pretty chamois moccasons have I made them; and in other young households they have been adopted and babies rise up by chairs and step along safely and gracefully and their fathers and mothers call me "blessed" for thinking of the safe moccasons.

And, girls, they are so easy and nice to make for gifts to your baby friends. It is such comfortable sewing, soft to the fingers and no edges to turn in; no ravelling, or thick seams, but just a smooth glove-seam and some embroidery.

You get a large and evenly dressed chamois skin — in shop-language "Shammy," "this size, one dollar." That and some threads of embroidering silks make the outlay. "Like the setting-hen you charge nothing for your time," and as a large skin makes five pairs of moccasons you see the result is "*magnifique et pas chèr*" as the shop-phrase goes in Paris.

My diagrams will, I hope, be clear. If you will first outline the patterns on the wrong side of the skin, fitting the different parts to the shape of your material, there will be no waste, and you can go about your work with the rolls all ready to be taken up at odd times.

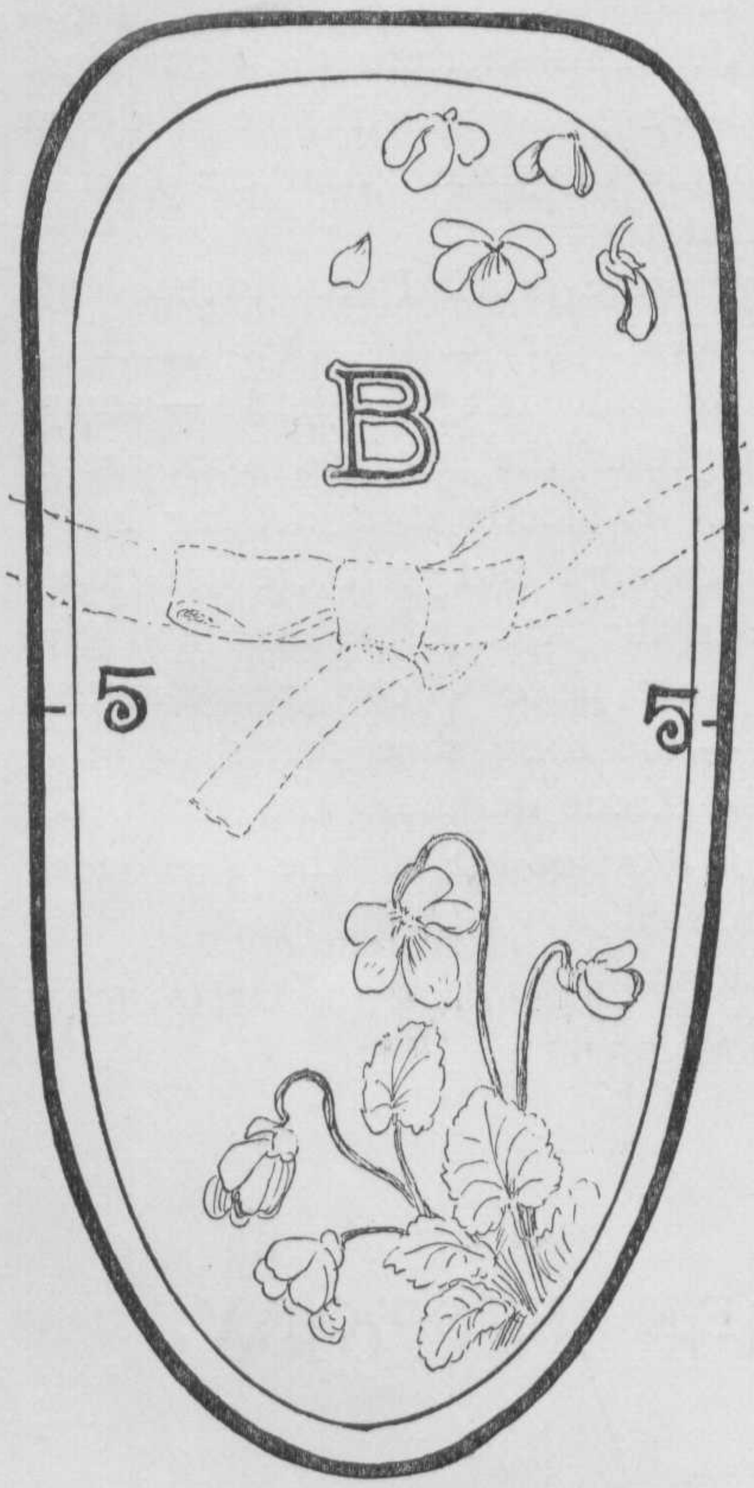


FIG. B.

It is very pretty work to do baby-shoemaking as you sit at evening around the large table and a shaded lamp gives good light on the tan-colored goat skin; and while some cut, the girls who embroider can do the little front piece, those who cannot embroider can make the neat glove-seam-joinings of the pieces — and in less time than you could fancy the shoes are finished.

Nurse Katy sometimes would write me: "Please, Naamah" (Jack for Grandma), "we have had a misfortune with our shoes and Jacky is barefoot;" and back, by mail, the next day, would get to her the letter with a pair of moccasons inside.

I would be begged not to make them too pretty to wear, so it would be a quick outlining in black or red sewing silk of a hissing goose on one foot and a waddling duck on the other, a cow's head or a doggie — something to please the little wearer — and quickly bound with a narrow ribbon. Red washes. Another good in these shoes is their cleanliness. A little borax and warm water — no soap — and they can be made purely fresh. Dried on the pine form used for drying little woollen stockings they keep their shape.

And we have found the ankles were *not* "left weak," for at four years old Jack could take a standing jump of four feet clear, often some inches beyond. It was good to see how every limb and muscle answered, true as fine machinery, to its appointed use.

You can show affectionate remembrance of a young married friend by keeping "The Baby" in pretty and wholesome shoes for a year, for the five or six dollars you would spend for some ready-made present she might never use, a fan or a glove-box or a thousand stupid things.

If you want to be very complete and are making a special "first pair," work them with forget-me-nots, or small daisies or rose-buds, and make a shoe-bag of sash ribbon to harmonize in color. Divide it for the two moccasons, first working a flower or initials

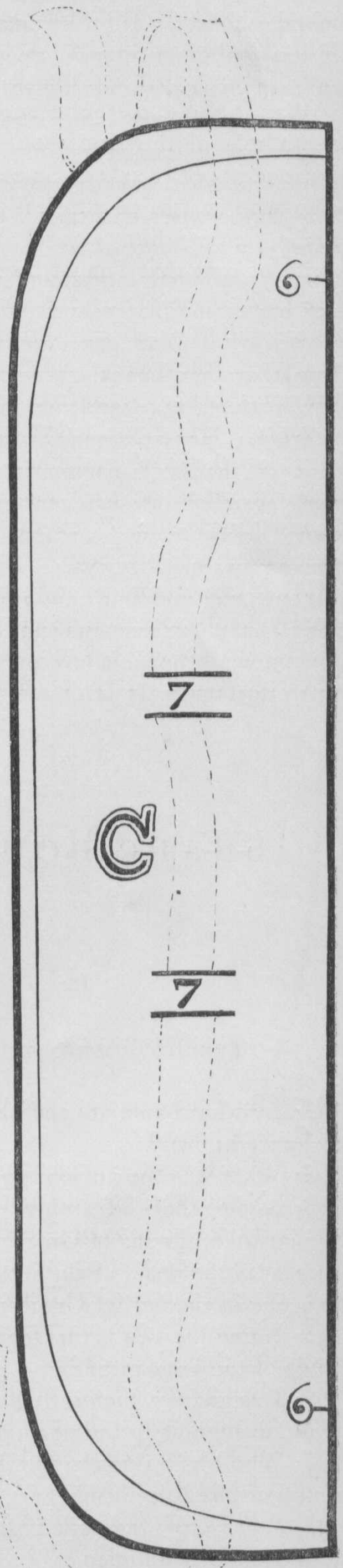


FIG. C.

on each pocket. Into the small shoe put the permitted bonbon of infancy, a peppermint drop, done up in silver paper and tied with narrow ribbons.

Wanting to make quite sure of my idea of the usefulness of the moccason, and the risk of the buttoned boot, I asked some questions of a physician who is wise in surgical treatment of injured limbs, telling him what I had been asked to write of and that I must be sure of no mistakes. He showed me plates and models and explained as only a full mind can, briefly and convincingly, that from the time a child tried to use its feet they *must* be kept free from any hard or cramping covering. He explained to me that *lateral* movement of the heel machinery. I am not in the least informed on such matters except as I have been "house-nurse" to the inevitable surgical cases in a family of boys.

What came more in my scope was a poor little greasy, baby-moccason he showed me — brought to him among other Eskimo objects by Col. Gilder of Arctic fame. It is of almost exactly the size and shape of those I make for a year-old baby. With one difference belonging with their climate; the heel piece is not open as our Indians wear them, but sewed together *with a little gore to give play to the ankle.* This shortens the front piece which is sewed — a *glove-seam* with fine sinew for thread — up to the top-piece. And the heel is *gathered* in to that also.

The standing piece is nearly two inches high from the sole. This part of the shoe has been made from *five* different irregular pieces — scraps neatly pieced together, the sole and front are of one piece each. Evidently it is nothing but a very poor person's work and yet there are traces of mother-love in the attempt to curve and give grace on the front piece. Poor greasy mother and oily baby — the little shoe seems to bring them out of the Arctic darkness and within our warm homes, for they too are of "the little ones" of whom we are told to "harm them not."

My little shoes are carrying me too far, for here we are at the North Pole.

SEARCH-QUESTIONS IN GREEK HISTORY.

Oscar Fay Adams.

I.

PREHISTORIC AND EARLY GREECE.

1. By what name are the primitive inhabitants of Greece known?
2. What was the ancient name of Greece?
3. Name the god at first most honored by the maritime nations of Greece.
4. Was the coast or the interior of the country the scene of the earlier Greek myths?
5. Name the two main races who colonized the shores of the Ægean Sea.
6. Designate which of these settled in the mountain regions in the north of Greece.
7. Who was Minos, and why is his name an important one to remember?
8. What city was called the seven-gated and by whom was it founded?
9. Of what was the Amphictyonic Council composed, and why was it established?
10. What is meant by the phrase "the return of the Heraclidæ"?
11. With what event did the Greeks begin their chronology?
12. Name the most ancient city of Greece.
13. Which was the most important of the Peloponnesian states, and who its greatest statesman?
14. What unwalled city in this state resisted the various attacks of its enemies for eight centuries?
15. Who were the Helots?
16. What city once called Cecropia was afterwards named in honor of Minerva?
17. How many Messenian Wars were there?
18. What people invented the triremes?
19. What city was the home of the leader of the Grecian forces in the Trojan war?
20. What small state guarded itself from overpopulation by frequently sending out colonies, one of which founded Byzantium?



A YOUNG PRINCE OF COMMERCE.

By Selden R. Hopkins.

CHAPTER II.

FAIRS; AND AT THE FAIR.

RAP, rap, rap.

"Somebody's at the door, Amos," said Mrs. Wharton.

"Come in," called a man's voice.

The door opened and there stood a boy, a stranger. "Good morning," he said, lifting his cap.

"Good morning," slowly responded Mr. Wharton, as he eyed the boy. "Come in, my lad, and have a cheer," he added, raising his spectacles to see more clearly.

"Thank you, sir," said the boy, walking toward the seat. "Is this Mr. Wharton?"

"That's my name, but I'm sartin I don't know who you be. If I've met you afore I can't remember you now."

"You never met me before," said the boy. "My name is Albert Vangrift, sir. I was told you wanted to hire a boy, and I am looking for a place to work."

"You're lookin' for a place, be you? Well, I did want a boy to help me plant 'taters last week. But I guess I don't need anybody jes' now. Might want a boy arter a while. Where do you live?"

"I came from Weed's Corners here, sir, though I can't say that that is my home. I have no home at present except at places where I find work; but I can work, Mr. Wharton, at least I am willing to try."

"I should be right glad to give you some work, my lad, for I like to encourage a boy who says as how he can *try*. Where are your folks? Do they live about here?"

"No, sir. I have no parents. They were lost at sea, sir, a few months ago. I have two sisters and a brother who are with an aunt, and I hope to earn something to help them along. I have never worked much on a farm, but I think I should like it."

It was all Albert could do to finish this sentence. His heart was heavy, and a few tears stood in his eyes.

"Well, I guess p'raps I *can* give you work for a while, and maybe for the summer. You may stop anyway, and we'll see in a day or two what kind of a bargain we can strike."

"All right, Mr. Wharton, I'm very thankful to you. I'll stay and I hope I shall please you."

The home of Amos Wharton was at what is now an important commercial centre in New England. At the time he lived there, however, it was a little hamlet. He owned a small but well-tilled farm which yielded a modest living. He was a hard-working farmer, but favored by nature with a taste for investigation and study. Rough on the exterior, blunt and outspoken in conversation, he still had a warm heart and a generous disposition. Though his language was unpolished he was by no means ignorant; instead he was well informed on the affairs of the day. His house was kept in farmer-like style; plain and unpretentious. But whoever came within its doors was made at once to feel that he was in the house of a friend, and where he could speak and act with ease. The house itself was beautifully situated beside a broad sparkling stream, in the midst of a group of tall maples and wide oaks, with well-tilled fields stretching out right and left.

The young man who had entered this cheerful, homespun family had but recently arrived in New

England from his home of terrible sadness in the West. The Probate Judge had appointed Mrs. Vangrift's sister guardian for the four orphan children as they had wished, and she had brought them home and was doing as best she could to provide for them.

Albert was a remarkably fine-looking boy, straight as an arrow, with fair complexion, regular features and dark brown hair. He was not a sprightly lad, but what he lacked in activity he made up in perseverance. He had something of a will of his own, and his force of character was accompanied with strong desires to do as he pleased, which sometimes got the advantage of his judgment. But this was only a temporary turn of mind soon righted by his good sense. Besides he had an active and sensitive conscience.

Farmer Wharton continued to be pleased with Albert and within a few days made arrangements for him to remain at least several months.

"But I must tell you," said Albert, "I cannot bind myself to stay excepting from month to month. I have two small sisters and a brother and I must provide for them as soon as I can find a place where I can earn enough. I shall also want to go as often as once a month, to see them."

"That's all right, my boy," said Mr. Wharton, more pleased than otherwise. "You may take Bob and the buckboard whenever you think you ought to go."

Albert found in the Whartons firm friends and he soon felt they were interested in his welfare. Mrs. Wharton, although she had children of her own, had a motherly interest in the lad. He was not only paid for his services, but was given time to study and provided with books. He remained with the Whartons during the summer and went frequently to see the little loved ones at his aunt's home.

One day as Mr. and Mrs. Wharton were discussing the subject of placing Albert in school for the winter, the boy came rushing into the house quite excited. Forgetting himself he interrupted the conversation:

"Mr. Goodwin is going to the fair to-morrow, and says he will be glad to have me go with him. He is to stay only one day. I have never been to a fair in my life, and I should like dreadful well to go. Can I?"

"Fair! where?" said Mr. Wharton.

"Why, in Boston. That's where the fair is, isn't it?"

Now, it was more than fifty miles to Boston; and that in those days was a long distance wherever there was no railroad. It was the journey of a day from their town, as farmers usually travelled with their wagons laden with products for the market. Some thought it necessary to take even more than one day, though with good roads and such horses as Farmer Goodwin drove, it was not an exceedingly tiresome undertaking. But Boston was not the nearest market for the farmers about Williston, and few of them were in the habit of going so far except upon special occasions like "fair week."

Young Vangrift had many times wished for an opportunity to visit the great city. He had heard from acquaintances what they had seen there — the large and elegant buildings, beautiful streets, wonderful stores, factories, the harbor, shipping and many other features. He had long wanted to witness these sights with his own eyes and judge for himself of their grandeur. No wonder that he came in excited at so near a prospect of doing it.

"Do you think, mother, you can get him ready on such short notice?" asked Mr. Wharton of his wife.

"I will try," said Mrs. Wharton; "but I should have liked at least a few days notice, especially as he is going to the fair."

Albert went early to bed and his motherly friend sat up late arranging the many little details for his journey. The Sunday suit was brought out, the clean linen was put in readiness for a hasty dressing, the luncheon was prepared, and all was made ready for an early breakfast. And as the first rays of the sun were shooting up the sky Mr. Goodwin and Albert were setting out on the long and wonderful journey.

Neighbor Goodwin was a talkative and well-read man. Albert was anxious to know something about the great fair he was to visit on the morrow, and as he found his companion ready to give information, he plied him with questions.

"I wonder how they happened to have the first fair, and who it was that first thought of such a thing?" began the young philosopher.

"Fairs are pretty old institutions," said Mr. Goodwin. "They originated with the ancients

long before the Christian era, many hundred years in fact. But I don't suppose any one knows just how or when."

"Do you suppose the religious festivals of ancient times had anything to do with bringing fairs into existence, Mr. Goodwin?"

"Perhaps so; most likely in fact. The pilgrimages that the Israelites made three times a year to Jerusalem and also every seventh year might well have been instrumental in building up fairs."

"I think I have read somewhere in history, Mr. Goodwin, that traffic between nations was largely kept up through periodical fairs and festivals. Is that so, do you suppose?"

"Yes. But they were not instituted as our fairs of to-day are. Fairs and festivals owed their birth then to some important event which they were established to commemorate. When a city was founded, for instance, the occasion was memorialized by a fair or festival held every year thereafter. In ancient Athens a great many fairs and festivals were held. Besides the local gatherings which were numerous throughout Greece there were many of a national reputation. Some were called games, such as the Olympic games, the Pythian games celebrated every fifth year in honor of Apollo at Delphi, also the Nemean games."

"But those were not like the fairs we have now, were they, Mr. Goodwin? I suppose, though, I shall know something more about what a fair is myself by to-morrow night."

"In some ways they were not, and in others they were. The games consisted of all sorts of sports popular at that time, such as running, wrestling, boxing, horse-racing, chariot-racing and regattas or boat-races. Philosophers came to these resorts to read their books, for printing had not been thought of, and to instruct the people upon the topics of the day. Merchants and manufacturers brought their wares and goods, and those who desired came to buy. Those institutions, you see, *were* something of the nature of our State fairs, but did *not* resemble our mechanical institutions which are designed more especially for the exhibition of inventions and of the products of mechanical skill."

"And did the kings and other sovereigns attend the games and fairs, do you suppose, Mr. Goodwin?"

"The kings granted permits for holding such institutions, and none were allowed except such as had the sovereign's authority. Yes, kings, queens, princes, and noblemen, often took part in the fairs or honored them with their presence."

"And who was it, I wonder, who 'got up' the fairs in those days?"

"Oh! various persons. The permits were usually granted to towns and sometimes to favorite noblemen. There was at one time a law which said that people attending a fair or festival were not for the time subject to arrest for debt, nor while they were going to or coming from the place. This law, if we are correctly informed, granted a very great relief to a large class who were generally in fear of imprisonment for owing what they could not pay. But it was during the tenth and twelfth centuries that fairs somewhat, or rather more closely, resembling the institutions as we now know them, were first established. Among the earliest were those of Flanders. At the time America was discovered they were common throughout Europe. The custom was brought to this country by our earliest ancestors. But the fairs and festivals first known on this side of the Atlantic were rather different from such an exposition as you shall see before many hours.

"And, I should suppose the objects of fairs now are different too, from what they were several hundred years ago. They were then more like places of amusement, were they not?"

"Yes. Fairs are now maintained as means for fostering and encouraging industrial pursuits. With the money received for admissions a fund is formed out of which prizes are purchased and given as premiums. Money is also often given as the prize. Thus people are prompted to excel in skill and ingenuity, and in raising stock and growing fruits, vegetables, grains and other things. The granting of patents by the Government has worked harmoniously with the system of premiums and prizes offered by fairs for inventions."

"I was reading last night of the fair of St. Bartholomew which is held in London; I suppose that is or has been one of the most noted ever known," said Albert, bent on gathering all the information possible.

"Yes. St. Bartholomew's fair was founded in the twelfth century, and for a long period was one of the greatest assemblages for trade and com-

merce known in Europe. For many years the chief articles of trade at this fair were wool and woollen goods; but the traffic in many other commodities must have been very great. During the eighteenth century the great annual gathering had drifted into a rendezvous for politicians, and also had become a huge museum with all sorts of shows and comic performances." *

"Then, Mr. Goodwin, there is the Donnybrook Fair about which Pat McKiverty talks so much, though I don't suppose he ever did really attend it, did he?"

"Pat may have been there for ought I know, Albert. Donnybrook is a village about two miles southeast from Dublin and is chiefly celebrated for this institution, which was granted by King John. Originally it was intended as a fair for the sale of horses and black cattle, but it became notorious as a place of riot and drunkenness and grew to be a resort for the 'hard cases' of Dublin. After repeated efforts the officials succeeded in restoring it to respectability and have suppressed much of the lawlessness for which it was noted.

"And there are equally as important fairs on the Continent, are there not?" pursued Albert. "Our Jake often told us about the fairs of Leipsic and Frankfort. I think he said the fair at Leipsic was held three times a year?"

"The German fairs have been considered of more importance than any others of Europe," said Mr. Goodwin. "The most prominent of these are the fairs of Leipsic, Frankfort-on-the-Main, Frankfort-on-the-Oder and Brunswick. The Easter Fair of Leipsic is widely known for the book trade which centres there. The sales of books at the Leipsic Easter Fair often exceed six million dollars. The attendance is fifty to sixty thousand, and they come hither from nearly all parts of the globe."

"I have read somewhere, Mr. Goodwin, of a fair in some part of Europe which is often attended by three hundred thousand people or more. Where is it — do you remember?"

Mr. Goodwin drew a long breath at the persistence of his young catechiser. But he proceeded to answer:

"I presume you have in mind the Russian fair held annually for eight weeks at Nijni Novgorod about two hundred and sixty-five miles nearly northeast from Moscow at the confluence of the Oka and Volga rivers. This fair is one of the great wonders of the Russian Empire. There are, if I remember rightly, more than three thousand distinct stalls or departments for the sale of goods. These are so divided into districts that every special class of merchandise is given its proper locality; one for silks, another for tea, a third for furs, a fourth for iron and so on." *

"Oh! I should be so delighted to visit some of the great fairs of the old world," said Albert, "but I shall probably never be able to get nearer one of them than Boston. I think I would especially like to see the fairs at Mecca in Arabia and that one in Hindostan — at Hurdwur, is it not, Mr. Goodwin?"

"At Hurdwur, yes, in the northern part of Hindostan. Those are indeed most wonderful gatherings, and the numbers which assemble, according to reports, are so great that I am sometimes almost inclined to doubt their accuracy. It is said that as many as three hundred thousand people often congregate at the Hurdwur fair which takes place annually, while at the one which occurs every twelfth year there are more than a million and a half. Not so many are to be seen at Mecca, but the sight is extremely interesting. These places afford a good favorable opportunity for studying those peculiar Eastern peoples. Religion, business, and pleasure, are curiously intermingled. The men, women and children are decked out in their national costumes, and visitors say the sight is indeed deeply attractive."

Mr. Goodwin knew that he was talking rather "like an encyclopædia," but the boy by his side was all interest.

"I suppose there is no other part of the world where fairs and festivals are held in such high respect, nor where there are very ancient institutions of that kind," queried Albert, eager for more.

"We can have nothing in the United States to compare with the great fairs of those old Eastern countries and probably never will have," said Albert, with a patriotic sigh which amused Mr.

* A very interesting little book is one entitled *Memoirs of Bartholomew Fair*, written by Henry Morley and published in London in 1859. It is well worth a perusal.

* The United States Consul at St. Petersburg in a recent report to the Secretary of State says that the sales effected at this fair in 1876 amounted to 150,000,000 rubles, or $75,000,000. He expresses the opinion that the great fairs of Russia, and there are several of national importance, are injurious to the trade of the country rather than helpful to it.

Goodwin. "But what in your opinion, Mr. Goodwin are the most important fairs we have?"*

"It is not safe to predict what may or may not be accomplished in this country even in our own day, Albert," said Mr. Goodwin. "But the most important fairs in the United States, I should say, are these at the Mechanics' Institute in Boston, the American Institute at New York, and the Franklin Institute at Philadelphia. These are the oldest of note. Then there are the State fairs in every State, and the county and town fairs are continually growing in importance."

"Are the State fairs owned and managed by the States, and do the Governors and State officers have charge of them?" inquired Albert.

"No. They have no connection with the State government, nor have the State officials anything to do with their control. They are much like many other private enterprises, though not organized especially for speculation or profit. As a rule they are managed by an association of persons interested in promoting the interests of the commonwealth and encouraging manufactures, agriculture and all the useful pursuits of the people. The associations are formed in most States under charters issued by the State legislature or under some general law. In order to have as large a number of people as possible interested in the enterprise memberships in the association are sold and the influential people of different parts of the State are induced to purchase them. The members hold meetings every year and elect officers such as a president, vice-president, secretary, treasurer and superintendent. The associations offer awards or premiums to exhibitors and charge a small admittance-fee both to exhibitors and visitors."

Here the conversation was interrupted, by the first sight of Boston. As the wagon came to the top of a hill they beheld church spires in the distance, and huge volumes of smoke were seen rising up from the mills and factories. The waters of the broad bay and the shipping of the harbor presented a majestic sight. Albert from this time viewed with intense interest the passing scenes, until he was landed upon the steps of the large, and to him, magnificent-appearing hotel.

* We may understand from this remark that this conversation must have taken place before our own world-famed Centennial in 1876.

During the evening Mr. Goodwin took him out for a stroll through the streets and for the first time Albert's eyes feasted upon the sights in the shop windows of a great city. At daylight the next morning the boy was in his clothes and out in the streets trying to find his way to Faneuil Hall and Quincy Market. Before the breakfast hour he had discovered these noted localities, strolled through the walks between long rows of marketmen's stalls, and was back to the hotel ready to relate his experiences.

After breakfast Mr. Goodwin took the young farmer down to the docks where he gazed with wonder upon the ships and busy tug-boats, and then they hastened away to the fair. Here Albert sought out from among the multitude of novelties those things which were newest to him and which demanded most study. But his mind was divided between the endless variety of inventions in the fair and the wonderful stores and shops of the great metropolis of which he had got but a glimpse and which had appeared to him like a moving panorama. He walked around among the machinery which was in full operation. The manufacturers of some steam engines had placed one of their most powerful machines on exhibition and were supplying power with which a variety of mechanical inventions were set in motion, and Albert could not tear himself from its neighborhood.

But by mid-day young Vangrift began again to feel that though there was much to be seen within the mammoth halls yet he really would prefer to be out and to see more of the business part of the city, and to enter some of the great shops and stores he had passed on his way to the fair.

He was about setting out to look for Mr. Goodwin when he heard a shrill scream of fright. He rushed forward in the direction of the cry. A young lady passing through a narrow aisle had been caught by her dress in the machinery and was being wound in among the revolving wheels. People from every direction came rushing up, but Albert was ahead, and with a bound he was over the shaft. Seizing the fainting figure in his strong arms he held fast his hold while the grinding wheels tore the fine satin flounces into threads. A moment, and the danger was past.

(TO BE CONTINUED.)

SOME SUCCESSFUL WOMEN.

By Sarah K. Bolton.

II.

MARY LOUISE BOOTH.

TALENT does not always make a home delightful, nor a character lovable. No one, save Boswell, thought the great Johnson attractive for daily companionship, and Jane Welsh Carlyle found Craiggenputtoch cheerless. But where talent and taste combine, where sweetness and strength round out a character, where the grace of love and the dignity of mind unite, there one obtains rest and companionship.

In the upper part of New York, there is one of those ideal homes, well-known these many years to those who follow literature and art. Its owner, Miss Mary L. Booth, is a woman in middle life, who, though in independent circumstances, is proud to labor, and believes in so doing like all sensible Americans. Does she remain in her dainty and beautiful parlors through the day, doing fancy-work, or reading the latest novel, or receiving calls, or driving in Central Park? She goes regularly to a down-town office, where from morning till night she superintends every detail of the work on a large and popular newspaper — *Harper's Bazar*.

At night she is found in her home with her friends about her, happy because her life is full of noble effort. A beautiful woman, indeed, with gray hair, gentle manners, and a generous heart. Eminently successful herself, like Whittier she delights to help others, her kindly face showing how genuine is her helpful spirit.

Miss Booth was born in the little village of Yaphank, N. Y. Her family removed to Brooklyn when she was thirteen. Her father, a man of education and nobility of nature, organized the first public school ever established in that city.

The parents were both deeply interested in their little girl who at five years of age had read the Bible through, and Plutarch's *Lives*, and at seven, Racine in the original. At this age, seven, she was also taking lessons in Latin from her father. So eager for books was she that before she was ten she had read Hume, Gibbon, Alison and other historians.

It was not probable that such a girl would grow up frivolous and useless, fit only to exhibit fine gowns upon. Rather such a girl would become the companion of educated men; a noble member of society. It was fortunate her parents saw that a woman must be very considerably educated if she would accomplish anything important and noteworthy, that the education of the usual boarding-school would not answer her purpose, but that she must be given such as a young man receives at our best colleges.

Her tastes inclined her toward the study of the languages and the natural sciences, and in these directions she worked earnestly, in connection with general training.

It was not at all strange that she began to write early for publication. With a father able to support her, she yet enjoyed earning money for herself. What girl possessing both force and independence of character does not enjoy money which has come to her from her own effort?

With a remarkable knowledge of French and German, such as a lover of those tongues would gain in enthusiastic and diligent study from seven years of age to womanhood, Miss Booth naturally turned to the congenial work of making translations of the finer literature of both languages — thus putting her readiest knowledge to use first. Among her earliest translations were Méry's *André Chenier*, Victor Cousin's *Life and Times of Madame de Chevreuse*, Marmier's *Russian Tales*, and Edmond About's *Germaine*, and *King of the Mountains*.

All this was close hard work for a young woman, but Miss Booth never sought nor wished for easy or trifling tasks. Light labor never develops character, and the development of thought and character is surely the great purpose of both literature and life.

One day a friend suggested to her that a history

of New York City would be of great use and benefit in schools, and as a complete one had never been written, it might be wise for her to attempt it. Many a trained literary man would have been deterred by the necessary labor; but an energetic, educated girl, what could deter her? She was thorough, by all her habits, also accurate, patient and persevering; an essential equipment if one would write history.

Turner said he had "never known any genius but that of hard work," a statement that most successful workers have found to be true. Miss Booth not only had no dread of toil, but she was possessed of a will and a wish to do only noble and important work. Still, would she not tire of this task when she should find how long, how slow, was even the preparation for doing it? Well, she did not tire, though she worked for years at gathering together her materials; searching public and private libraries, talking with literarians about books, talking with specialists and antiquarians about events, dates and localities, talking with statesmen and public-minded men about the significance of this act, that policy, and a multitude of occurrences and enterprises. To be sure her pleasant manners and her scholarly devotion made this comparatively pleasurable work. Those who possessed the knowledge she sought helped her gladly, appreciating her intention to do thorough work, and, above all, her patient and careful preparation for it. Then followed the slow toils of sifting, of comparing and collating. All this before she wrote the first page of her manuscript.

At the publisher's suggestion the small school-history first projected was laid aside, and only served as the preliminary study for a large octavo volume of about a thousand pages, which was the first complete History of New York City ever published. The reception of the book everywhere was cordial. The style was clear, graphic; simple as is all good writing. Second and third editions soon appeared; the last one, in 1880, brought down to date. A large paper edition of one hundred autograph copies was also published, so popular was the work, and book-collectors enlarged their copies with portraits and autograph on interleaved pages.

One copy, extended to nine volumes of several thousand maps, letters, and illustrations, is owned in New York. A collector in Chicago has extended his to twenty-two volumes. Miss Booth has in her library a large paper copy presented to her by an eminent bibliopolist, which contains over two thousand illustrations on inserted leaves.

What should she do next? for such a young woman has no thought of stopping her work with one great success. Her publishers proposed that she should go abroad and write popular histories of London, Paris, Berlin and Vienna, but the Civil War came, and its matters soon filled her mind.

She was most earnestly opposed to all the ideas and outcomes of slavery. Her brother, a mere



MARY L. BOOTH.

youth, had entered the army. Could she not help also, in the cause of liberty?

Just at this time she received an advance copy of Count Agénor de Gasparin's *Uprising of a Great People.* She took it at once to Mr. Scribner and urged him to publish a translation; but he told her the war would probably be over before there was time to bring it out. Finally he said that if the manuscript could be ready in a week, he would publish it.

She hurried home; and writing twenty hours out of twenty-four, in a few hours less than a week the book was ready for the press. This

work was read from one end of the country to the other. Charles Sumner wrote her, "It is worth a whole phalanx in the cause of human freedon;" in a large and famous collection of autographs in Miss Booth's library are the grateful letters of Abraham Lincoln, Edouard Laboulaye, Henri Martin, Edmond de Pressensé, Galusha A. Grow, with scores of others, both from America and Europe, thanking her for this and subsequent books.

From the most prominent European authors she now received pamphlets on the questions of the day, which with advance sheets of their books she translated and published without asking or wishing remuneration. This work she was doing to serve her country in its great work of regeneration.

She soon translated Gasparin's *America before Europe*, Laboulaye's *Paris in America* and two volumes by Augustin Cochin, *Results of Emancipation*, and *Results of Slavery*. Later, she translated Laboulaye's *Fairy Tales*, Jean Macé's *Fairy Book*, which were published by Harper & Brothers, and several of the books of the Countess de Gasparin, including *Camille*, *Vesper*, and *Human Sorrows*. One book-case in her large library contains some forty volumes of her own translating. What an amount of work from a single pen! More recently she has translated Laboulaye's later fairy tales, beautifully illustrated.

After the close of the war, her next great task was to translate six volumes of Henri Martin's *Unabridged History of France*, and then in connection with Miss Alger, the historian's abridgement of the large history. On the library walls of Miss Booth's home are the kind faces of these Frenchmen, Henri Martin, Gasparin, and Laboulaye, in company with Julia Cameron's beautiful autotype of Tennyson, and the portraits of Dickens, Alice Cary and other celebrities.

In 1867 the Harpers desired to start a new family journal, and they asked Miss Booth to become the editor. She hesitated to assume so great a responsibility, also involving daily and systematic labor throughout the year; but, accepting, she proved her fitness for the work. *Harper's Bazar* soon reached an immense circulation, paying its way from the first, a thing unusual in journalism. For more than nineteen years Miss Booth has made this paper bright, fresh, pure, reliable, sensible, and a great success. Its corps of contributors has included the leading writers of Europe and America.

Meantime her home has been a literary centre for cultured people. Every Saturday evening one may meet in her parlors, authors, statesmen, artists, the gifted from all the professions. The rooms are cheerful and light in color, and the hostess and her adopted sister, Mrs. Anne W. Wright, are as cheery as the home they brighten. Here are countless tokens of friendship: vases from Japan, old silver from Norway; jewels from the neck of the Queen of Montezuma; unique things from Mexico and the Indies; and the hair of Shelley, of Keats, fine and brown, of Byron, dark, and of Leigh Hunt, in the same case. The pictures on the walls are the gifts of famous friends.

As we sit in the back parlor looking through the handsomest album I have ever seen, Russia leather with silver clasps, a birthday gift to Miss Booth from the friends who attend her Saturday evening receptions, "Muff," a great Maltese cat, walks in, and apparently enjoys the faces with us. This seems like a bit of English home-life where a cat is always a petted member of the family, either in high life or among the lowly. In this album one sees refined Harriet Prescott Spofford, merry Grace Greenwood, artistic Richard Watson Gilder, handsome Whitelaw Reid, brilliant Mary Mapes Dodge, and scores of others, each contributing an original poem, or words of appreciation. A great cage of canaries, and a mocking-bird, in the window, help to make this New York stone house like a bit of country life, in its kinship with nature. Flowers, too, tell that Miss Booth is as refined as she is scholarly.

Miss Booth receives a large salary, proving that a woman besides making friends and fame can make money, and this brings her into striking contrast with the helpless women who are obliged to depend upon relatives, largely because they were not educated in early life to be self-dependent, and were not brought up to have a special pursuit or some definite and engrossing aim.

Miss Booth, notwithstanding her constant work within daily confines of "office hours," notwithstanding the many-sided superintendency devolving on her, notwithstanding the outgoes of vitality into the work of originating, criticising, deciding upon and bringing into symmetry the plans and details of a great, bright weekly journal, has

excellent health. Probably her daily and systematic labor is one secret of this health. For it is now admitted that where the mind is fully and regularly occupied and exercised, the body is in far better condition. She has had but one serious illness since she was a child, a rheumatic fever which she thinks she could have avoided with a little care and less confidence in her impregnable good health. Her mother is still living in superb health, a handsome old lady with sparkling black eyes and unwrinkled face, in her eighty-sixth year, residing in Brooklyn, with Mrs. King, Miss Booth's only sister. This mother comes from a long-lived family. Her grandmother was born in 1744 and died in 1844, a century old, retaining her faculties to the end. "I remember when a child," says Miss Booth, "hearing her tell of the days when the country was covered with forests, swarming with wild beasts and game, and thickly populated with Indians, for she was grown at the time of the French and Indian war, and married at the Revolutionary epoch. How young it makes our country seem thus to stretch hands to the middle of the eighteenth century, and to have stood face to face with those who knew the primeval forest!"

It is easy to desire Miss Booth's success for one's self, is it not? But how many women would be willing to start upon the years of untiring toil that has gained it? How many would serve her apprenticeship? Let us review the details of her work simply as an editor:

For nineteen years Miss Booth has been habitually at the *Bazar* office from 9 A. M. to 4 P. M. daily, usually taking a light lunch in the office; permitting herself only a brief vacation at midsummer. Every line of manuscript in the paper, and its proof, is read by her. Every illustration is scrutinized by her. You can see that she can have had few playtimes, and that her work must be thoroughly systematized; no time wasted in looking up what has been done or what remains to do. "Editorial work," she says, "like woman's, is never done; and the planning of which it largely consists goes on day and night without interruption. It is not what the editor writes, but what he chooses for his paper, that makes or mars his success. It is the judicial capacity that marks the true editor." She has shown herself to possess the rare talents that go to make successful editorship: a comprehensive outlook as to the needs of a cultivated people, variety of method, well-nigh unerring judgment, and a capacity for hard labor.

To work for the world and not to become soured by its indifference, to have strong convictions and yet be charitable toward those who think differently, to correct the faults of humanity without bitterness or personality, to keep a sublime hope in one's heart, to be as unostentatious as though she were unknown to fame, and to do her work as thoroughly and regularly as though she depended on her labor for her daily bread—all these lessons belong with Miss Booth's public work.

To show other women that a woman may have consummate ability, and yet be gentle and refined and warm-hearted, that she can be accurate, prompt, and thorough, and yet think out beyond the thousand details of everyday life, reaching for all beauty and grace, and that if one woman can stand at the head of a great journal it must be logically true that other trained women may come to stand at the head of the business they select—these, too, are public lessons of a life and a character worthy of study by our noblest girls.

AN OUTFIT.

WHAT does a Mermaiden pack in her trunk?
Sea-feathers, sea-fans, and pearls;
Some pretty sea-tatting
To work at when chatting,
And coral sprays red for her curls.

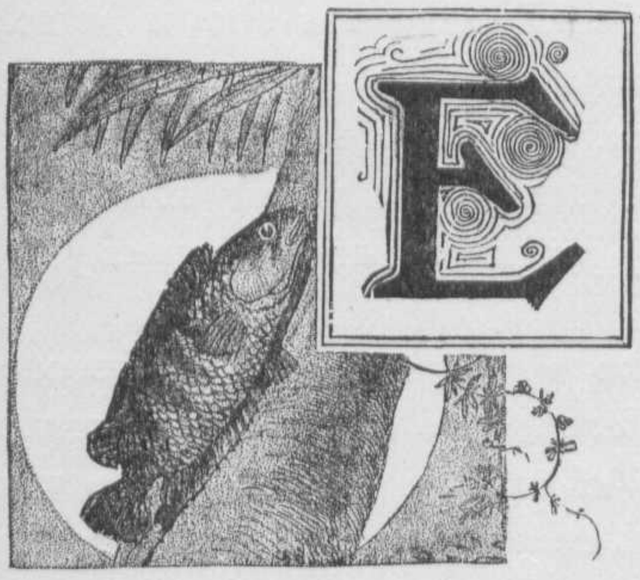
In case she works slippers, she puts in the soles;
A cape trimmed with scallops (to wear on the shoals),
A bright pair of skates,
Some sponges for slates,
And sand-tarts to give to the girls.

WONDER-WINGS, MELLANGONGS, COLOSSI, AND OTHERS.

By C. F. Holder.

II.

THE BIRDS OF THE SEA.



THE CLIMBING PERCH.

EVEN ordinary observers have remarked the resemblance of fishes to birds which is so marked that they are often named after them; as the snipe and parrot-fishes. It is in the southern waters, "in gulfs enchanted, where the siren sings, and coral reefs lie bare," that these striking similarities can best be seen. There the water is clear as crystal, so that small objects can be observed distinctly fifty or sixty feet from the surface; and in shallow water, from ten to twelve feet in depth, the inhabitants seem exhibited as in an aquarium.

Among the most attractive and curious forms are the parrot-fishes; so called because instead of having small teeth, which we see in other fishes, their entire dental apparatus seems to have been fused together, forming a hard and large pair of bills, or mandibles, calling to mind the beaks of a parrot. With this pair of nippers the parrot-fishes can crunch the ends of branch coral, bite through large shells to obtain the soft interior, and prey upon various animals which are safe from the attacks of ordinary fishes. In their coloring they also vie with the gorgeous parrots, and as in the large macaws the effect is startling. Some are all blue; others have a variety of colors, blue, brown, and green, arranged in stripes or in remarkable designs. The parrot-fishes are found in nearly all tropical seas, and are recognized by their brilliant decorations. Their method of swimming is also peculiar. The tail-fin; though powerful and broad, is not much used except when the fish are startled or alarmed. When swimming along, the side or pectoral fins are almost entirely used, producing a peculiar, even, gliding motion.

We know that some land birds often take to the water, the duck, penguin, and ouzel being examples; so the "birds of the sea" sometimes venture upon land. The majority of fishes make such protests when taken from the water, and so soon die, that it is difficult to understand how a fish would willingly thus jeopardize its life; but it must be remembered that it is only certain families of fishes who do it, just as with the birds. A robin or sparrow would be drowned quickly in the centre of a pond, while a duck would be perfectly at home. So a stickleback would die if placed on land, while some of the gobies would not mind it in the least; having with various other fishes certain modifications of structure that enable them to exist out of their native element.

This modification consists of a set or series of cavities that are no more or less than air-store-houses, and do not hold water, as is sometimes stated. In other words, when on shore these fishes breathe air directly, and when in the water obtain it from that liquid.

The best-known of the amphibious fishes is the climbing perch, which was discovered many years ago by the naturalist Daldorf in India climbing a tree. The movements of these fishes on land are extremely slow, the side and lower fins being the organs of locomotion; by moving them alternately and with great deliberation it proceeds slowly along.

The natives of India have long been familiar with this peculiarity of the perch, or Anabas, and they esteem them greatly for the market, as they can be carried for two or three days in a dry basket without injury. Undoubtedly the object of their leaving the water is to avoid the drouth that prevails in India at certain seasons when the water supply fails. Evaporation soon changes the pools into dry baked mud; and at the first intimation of this these fishes bestir themselves, and often a

wonderful scene is beheld; thousands of fishes crawling up out of the pools and in a solid phalanx struggling over the grass, and by some wonderful instinct heading for distant water.

There are fishes which crawl upon dry land to feed, as the ouzel or duck takes to the water for food. These wonderful creatures are found in the Fiji Islands and on various shores of that latitude, and are known as the Boleopthalimus and Periopthalmus. Those long-named fishes themselves are quite small, being only five or six inches in length, with large heads, prominent curious, movable eyes, and colored a deep olive hue. I know several gentlemen who have seen these quaint amphibians hopping about on dry land, but the most remarkable account was given me by Col. Nicholas Pike, a devoted naturalist, and late consul at the island of Mauritius, where he obtained some valuable specimens for his collection. In his walks upon the beach he often saw the Periopthalmi, but they were too nimble for him to catch; so he adopted the novel method of gunning for the fishes, taking those which he desired for specimens with a rifle.

The gobies of the Mauritius and Fiji Islands spend half their time out of water; crawling along by using their powerful arm-like side or pectoral fins. Once upon the beach they progress by leaping, and when stationary rest with the head elevated, ready to jump like a frog at the slightest warning. The rapidity of their movements may be imagined from the fact that it is difficult for a man to capture them.

The presence of fish underground is another surprising fact. In Gambia a fish called the Protopterus, descends in the dry time and remains in the mud of the banks until the water rises or returns. The natives in many parts of India literally mine for the torpid fishes which thus sleep away the dry season. An English officer reports watching the natives of Kottiar dig out fishes with shovels on the banks of the Vergel River. A shovelful of firm clay was lifted up and dropped heavily, when the fish, which were from eight to twelve inches in length, would be disclosed, extremely lively as soon as the sunlight struck them. Some of these fishes were found a foot and a half from the surface.

We find other fishes living in hot water. At Kannea, near the bay of Trincomalie, are some interesting hot springs whose temperature varies at different seasons from 85° to 115°. When at the latter temperature several fishes were caught — a loche (*Corbetis thermalis*) and a carp (*Nuria thermoicos*) were also taken in this spring where the thermometer indicated 114° Fahr. and a roach when it denoted 122° Fahr. Another spring at Pooree, with a temperature of 112° Fahr. also afforded fish, and at Manilla when the temperature was 187°; while Humboldt records having seen live fishes thrown from a volcano in South America, the water about them being 210°, or two degrees below the boiling point. Whether they were living in water of this temperature previous to being ejected was of course impossible to determine; the probability is that they came from a cooler subterranean river.

The birds of the air are more or less at the mercy of the wind. During their migrations they are blown long distances out to sea and are lost. Almost every outgoing steamer forms a haven of rest for many lost land birds. Remarkable instances show that the "birds of the sea" are also the sport of the wind. Some years ago a party were travelling upon elephants in India, and when near the town of Kallywar they were overtaken by a terrific storm. It being in the month of July, the time for floods, they were afraid to camp, and pressed on until they reached the neighborhood of Rajkote. But the storm grew more severe, almost blinding, and all at once the travellers became aware that something besides rain was descending. Heavy objects were falling; and to their astonishment they found themselves a moment later in a veritable shower of fishes; live ones, too, that fell upon them and the elephants in great numbers, sliding off into the grass, and presenting a curious spectacle.

To return to our comparisons between the birds and fishes, we find that the latter are also nest-builders. True, the fish-mothers that display solicitude for their young can be counted on the fingers. But if the mothers lack this care, the fish-fathers have an unusual amount, and assume family responsibilities. In their constructive ability, or the instinct which prompts them to erect homes, we see striking resemblances to the birds. The long nest in the gravel of the salmon, or the smaller one of the trout or sun-fish well compares with the sand-hollow of the gull, while the shapely

structure of the robin or sparrow finds a prototype in the nest of the stickleback — the officious, bombastic inhabitant of the streams of both continents.

It is the male stickleback that cares for the coming young; and as the season approaches he assumes a gorgeous garb of pink or red. Now if we have the little nest-builder in an aquarium let us drop a napkin ring into the water, suspending it from a string. He dashes at it, biting it with ferocity until he is sure it is not an enemy; then the strange object is carefully examined. If we have attached threads or bits of grass to the ring, and the rest of the aquarium is not provided with them, the chances are that he will adopt the ring as the foundation of the future nest, reminding us of the wren, that is seen at the nesting season examining the nooks and corners about the yard. Presently we see him (presuming him to be the *Apeltes quadracus*) devoting great attention to the grass or threads, nosing them about and pressing his body against them, and if we could approach close enough we should see that he is binding the threads or material together with a delicate silvery thread issuing from a minute pore in his body.

Now other threads and grass should be thrown into the aquarium, just as you provide the tame weaver-birds with string. These the little stickleback will collect and pile upon the nest within the pendant ring, until finally the nest assumes shape, half or entirely filling the ring. In the final touches, the little builder reminds us of a bobbin; indeed his shape is not unlike one, as into the nest he darts head-first, repeating the operation indefinitely until he wriggles through; then we have a ring within a ring.

Next the mother-fish is hunted up and driven to the nest, and there in the little cavity the eggs are laid. Over them the patient father now takes his stand, holding himself steadily in position, and fanning them gently with a vibratory motion of his fins, thus producing the requisite aeration. If he was pugnacious at first he now is positively mad; darting at everything that can be possibly considered an enemy. Place a hand against the glass, and the thud of his sharp nose is heard in a vain effort to get through. If other fishes happen to be in the tank it is best for them to keep a safe distance, for no matter how large, the proud stickleback-father darts at them, inflicting dangerous wounds with his sharp dagger-like spines, and soon putting them to flight.

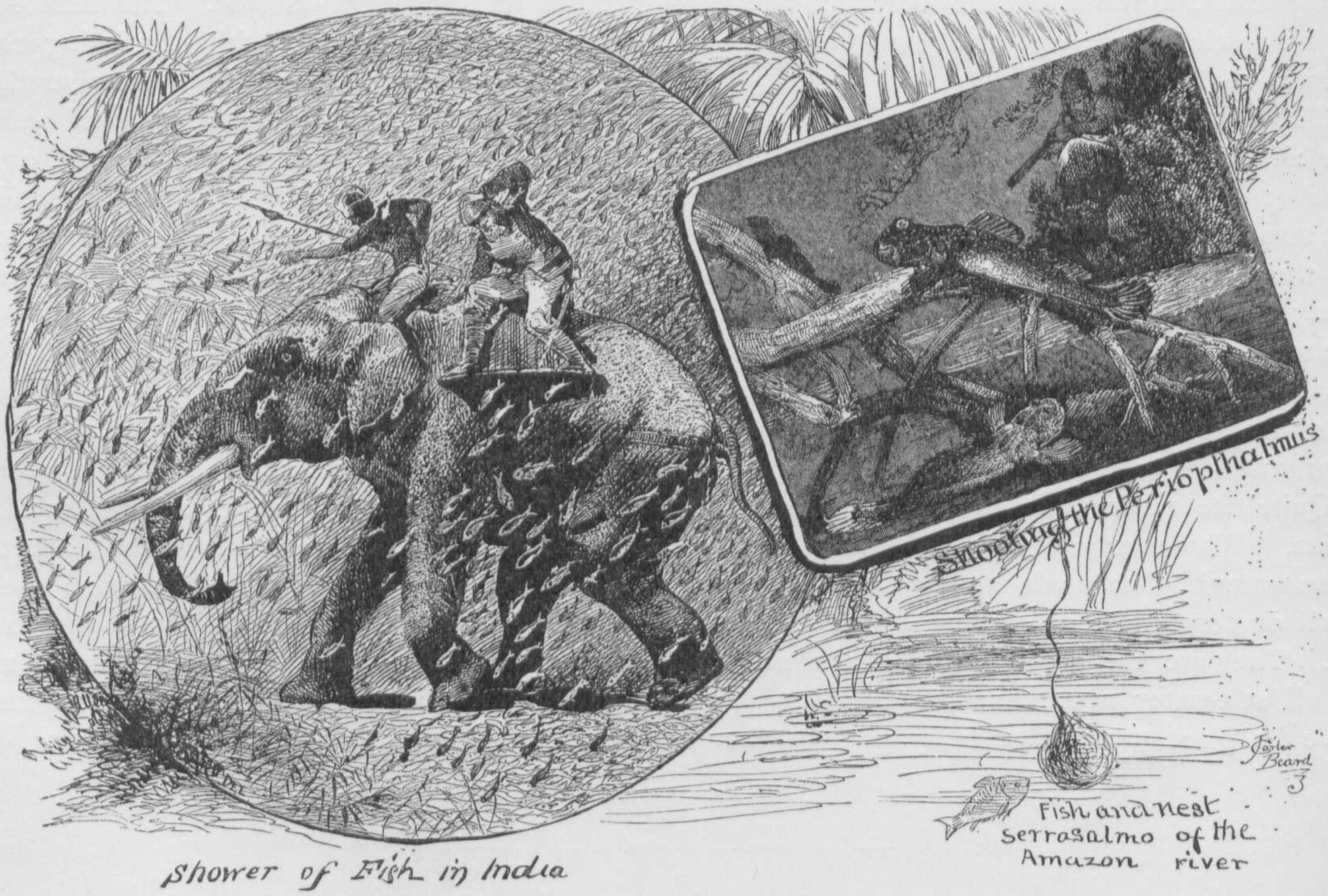
Finally this careful watchfulness is repaid by the appearance of the little ones, and the sharpest eyes are necessary to distinguish them. Now the father's attentions are redoubled, and every moment is taken up in preventing the baby sticklebacks from straying. I have seen him dart at the straggling little ones, and draw them into his mouth, and then violently expel or shoot them in the direction of the nest. But the older they grow the farther they wander, and finally the distracted parent gives it up and deserts them, and the nest soon becomes a moss-covered ruin, the resort of shells and other quiet loving creatures.

While the resemblance is perhaps not a strict one, the nest of the little South American serrasalmo calls to mind the swinging home of the oriole. The rivers of South America are often lined with a dense growth of verdure. Palms and other tropical trees often bend far over the water, casting a welcome shade for the fishes. These palms are sometimes encircled and connected by innumerable vines, or *lianes*, which wind in and out, and bind the vast forests in a maze. As the vines climb the palms and reach out, they continue to grow until they drop down in long ropes into the water. The end which dangles in the current throws out numerous shoots and roots, which soon form the lodging place of floating matter from up stream, so that in the course of time we see attached to the vine a miniature island blooming with flowers grown from seeds that in turn throw out roots themselves. This arbor catches the eye of the little fish, and is converted into a nest and nursery. In among the roots of the floating bower the eggs are laid, the parent fish taking its position beneath to guard the spot. When the young appear they find refuge for some time among the roots and stems, where no other fish would suspect their presence.

In the East there is a remarkable bird called the Megapodius, which heaps up enormous piles of material in which its eggs are deposited. Some of the penguins and other water birds roll pebbles and stones together as a protection for their eggs. Is there not a finny bird of the sea or river that has a similar habit? I made the acquaintance of such an one a few years ago on the beautiful St.

Lawrence. In rowing along in the little bay in the southern portion of Westminster Island I noticed on the right hand side of the rift a pile of pebbles and stones that must have been nearly a cartful. They looked as if a tip cart had backed and dumped them on the edge of the little channel for some definite purpose. So artificial was it in appearance that we concluded it was a lot of clinkers which had been thrown from a steamer or that some small boat had here cast over a load of ballast. Several days later in rowing along shore just at the entrance of the Lake of the Thousand Islands I found many more, telling of the perseverance and industry of the builders.

These nests are known to the St. Lawrence oarsmen as "chub heaps," and the chub, or scientifically *Semotilus bularis*, is the builder. I was fortunate in finding the nests in all stages of construction, from a mere outline to the complete nest that undoubtedly took several seasons to build. The newly begun nests *seemed* to show a plan of construction; thus the stones were dropped in a rude circle at first, as if the finny architects outlined the work before carrying out



Shower of Fish in India

Fish and nest serrasalmo of the Amazon river

Isles, opposite Westminster Park, I came upon three or four similar heaps, in shoal water. One of them was about ten feet in circumference and three or four feet high, approaching to within a foot of the surface, so that I readily reached some of the top pebbles. There were thousands of stones, and I estimated that the largest heap must have weighed nearly a ton, some of the stones that I secured weighing two ounces, while others at the bottom were nearly twice as large.

These curious heaps were the nests of fishes, and along the sandy and gravelly shores of the

the design. The nest is made by one or more chubs, each stone being brought in the mouth and dropped in the selected place until it assumes large proportions, the pile sometimes being high enough to stop a boat. How such a heap of stones can be used as a nest would seem an enigma, but the rocky castle contains innumerable nooks, corners and crevices in which the eggs and young find refuge from the cat fish, perch, and other forms which prey upon them; the eggs being deposited on the nest, the current washing them into the various "snug harbors."

But perhaps the most interesting and bird-like builder is the famous Gourami of the East which sometimes attains a length of five or six feet. At the nesting-time these fishes pair off and join forces in forming a nest, generally utilizing a grass known as *Panicum jumentorum*. As a rule the nest is erected on the bottom, but if the builders are provided with the limb of a tree or a branch the nest will be placed in it, so that in this respect it has a striking resemblance to that of the birds. The blades of grass are rudely woven in and out, fastened together with mud and in various ways until a solid compact nest is the result, in the interstices of which the eggs find a resting place and the young are ensured protection.

The fishes present the greatest contrast, as do the birds, in their movements. Some are always soaring, or at the surface of the water. Such are the star-fishes of the South. I have watched scores of them, and had them under observation for many consecutive hours, but never saw one leave the surface beyond several inches in chase of some smaller fish, and then it was to return immediately. They may be compared to the swallows which are nearly always on the wing.

Quite the reverse are the flounders and their allies. Who ever saw one swimming about in open water? One would as soon expect to see a quail or domestic fowl soaring a mile up in the air. They are the ground-birds of the sea, and in all salt-water aquariums the flounder should have its place, not for its beauty, perhaps, though it has eyes like veritable gems, and capable of the most astonishing movement. But the chief interest about these little flat fishes is that they persist in lying upon their sides, and that nature makes a remarkable attempt to enable them to do so with ease. To understand this thoroughly we should have several flounders, representing different ages — or stages of growth. Taking an infantile one we shall find that it is not disposed to be a flat fish; but swims about after the fashion of fishes in general, not confining itself to the bottom. This continues for some time, until suddenly the fish shows an inclination to sink to the bottom and lie upon its side. This habit seems to grow upon the flounder with astonishing results. For all this time, it must be remembered, the flounder has had the general shape of ordinary fishes, and an eye upon each side; but as this habit of lying down continues to grow, it is evident that one eye must fare badly — not only from being rubbed against the sand, but being deprived of its exercise as an organ of sight. But Nature objects to useless members, and if we watch the little flounder we shall see wonderful changes. First the mouth is attaining a remarkable twist; then the underneath eye is seen to have altered its position, and, finally, it moves around, so that in the adult flounder as we see it in the market the eye is quite near the other, both being on one side of the fish and of equal use. The mouth is also twisted to suit the new position. The entire modification as it is termed presents a curious instance of the effect of habit upon animals.

WAYS TO DO THINGS.

By Mrs. Annie Sawyer Downs.

LI.

HOW TO WRITE A COMPOSITION.

WHEN a child, I was much interested in Mrs. Wales' *Complete Housekeeper;* especially in the chapter, "How to Cook a Dinner," where the direction, "First, be sure you have a dinner to cook," always seemed to me so funny that I never thought of its truth.

I dare say a great many boys and girls will be just as much amused when I say, in order to write a letter, composition, essay, newspaper article, WIDE AWAKE story or book, the only really important thing is to have something to say.

It is easy enough to see it does not matter how

you cook a dinner if you have no dinner to cook, and it is not difficult to understand that it is of no consequence how you make a gown if you have no cloth; but when it comes to writing, many people act as if it were outside ordinary laws — a matter where practice goes for little, material for less.

But the truth is, the first, second, third and last requisite for a good composition is to have something to say.

Do I hear that you have nothing to say upon any particular subject? A little reflection will show you such an assertion is nonsense. You, who can chatter like a magpie, have nothing to say? And if it were so, it would be nonsense all the same; for information is as free as air or water. But the truth is you try to write about subjects outside your knowledge if not far beyond it.

Teachers are often more to blame than pupils for this part of the trouble. When I see ordinary students of fifteen or sixteen years, confronted with, "The Roman Catholic Church in America," and, "The Position of the Jew in History," I cannot wonder they are discouraged.

But supposing you have a subject in which you are genuinely interested, supposing you have consulted the books bearing upon it which you can obtain, have perhaps talked with intelligent friends and above all have thought about it — what is the next step?

Obviously: how long an article is required.

We will assume, inside five hundred words, making in ordinary handwriting four or five pages of commercial notepaper; and it being easier to show by example than by dogmatic rules let us take for our subject:

THE TRAILING ARBUTUS OR MAYFLOWER.

Holding a spray before the mind's eye, what is most noticeable about it?

Hard to tell; form, color, and fragrance imperatively demand attention.

So much the better. It is always well to choose a subject with many prominent characteristics; but we begin:

The trailing arbutus is a charming flower varying in tint from cream-white and the tender pink of a sea-shell to a deep rose, with a fragrance suggesting hyacinths or lilacs, though more delicate than either, while its form is that of a vase, which rising from a slender stem spreads widely at the top.

Its exquisite blossoms grow in clusters at the ends of its branches, and as we look into them, we notice a soft fuzz, which, thickly set like down, lines the inside of the throat. But we see likewise stems and leaves so odd.

Growing close to the ground, its tough stem is protected by tiny hairs, likewise brown, while its bright green leaves are stout and strong in texture; round or shaped like a heart, and not set opposite each other as are those of many plants. Thinking about the last point, we see the reason; the stem lying on the ground frequently roots in, therefore all the leaves must be on one side.

Thus we have covered its appearance, so far as is necessary.

Next, Why called Trailing Arbutus? We may find the answer in botany, dictionary, encyclopædia, or better still in all three, for it is never well to be satisfied with a single authority.

When first shown to early English botanists, they thought it resembled the arbutus, or strawberry-tree, which Virgil describes, and which really is its first cousin, belonging to the same order, but to a different genus. They considered that trailing arbutus — Virgil's arbutus was upright — would do for a common name, while they put down in their books, "epigæa-repens, or ground laurel," which is its correct title, as it means lying upon the ground.

But as often happens the wrong name clung to it, while the right had to take a back seat, and it is pleasant that we know it by a prettier than either, "the Mayflower." Everybody understands that name!

Even before the earliest Mayday, from North Carolina to Nova Scotia it has lifted its sweet face to the sun, and its delicious fragrance is borne by the idle south wind to every returning bluebird and awakened honey-bee.

Then, where does it grow?

Often close to the crumbling stone wall, or dilapidated board-fence, separating pasture-land from field or meadow, where the light snows of capricious April must be pushed one side before it can be found, frequently where the dry leaves

which the rustling partridge has disturbed, and in many a stony wood, on hundreds of rough hill-sides, at the roots of pines, spruces, and firs, on the sandy wastes of Cape Cod, in the great forests of Maine and Canada, and by the vast lakes of the far distant Northwest, but never outside the boundaries of America.

And last, why do we know it so much better, why do we hear so much more about it than we do about other flowers perhaps equally beautiful?

Because as it is the first wild flower to appear after the long and bitter Northern winter, and as it endures gathering and transportation better than the tender hepatica, or fragile wind-flower, it has become an article of merchandise and is sold in the shops and on the street-corners of many towns and cities.

In order that a sufficient supply may be provided the flower-dealers have agents in localities where it abounds who buy directly from blue-eyed little girls, and rosy-cheeked little boys. They bring a certain number of bunches to a specified place at appointed times, and often assist in packing them in wet moss for their railroad trip.

As the season advances, the bunches sell for less and less, and at the last for so little that all but the very poor may buy them.

Here is a specimen composition, where the writer had something to say and said it under four heads:

1. What it is.
2. Whence its name.
3. Whence it comes.
4. Why it comes to everybody.

It is said too, within the limit specified, and when written out legibly, and upon one side of the page only, will so delight the teacher, that next spring she will give the whole class a holiday to go after the Mayflower.

SEARCH-QUESTIONS IN GREEK HISTORY.

By Oscar Fay Adams.

II.

THE TIME OF THE DESPOTS OR TYRANTS.

21. What state remained a kingdom longest?

22. As the Grecian states gradually abolished royalty what form of government succeeded it?

23. By what persons were the oligarchies overthrown, and about what period?

24. What city was governed longest by the despots?

25. Name the most noted of its despots?

26. How long did Corinthian despotism last?

27. Which of the Corinthian despots is numbered among the Seven Wise Men of Greece?

28. What rank did Corinth attain under his sway?

29. What Milesian despot on receiving a Corinthian ambassador sent to solicit his advice, led him through a cornfield, cutting off as they went the tallest ears of corn?

30. What form of verse was during this period made the Corinthian public choral song, and by what poet and musician?

31. What philosopher flourished in Corinth at this time?

32. What despot obtained power in Megara?

33. To what party in the state did the Megarian poet Theognis belong?

34. Why has his verse historical value?

35. By what people were many of the despotisms subdued?

36. How did the Greek mind regard the "one-man power"?

37. In which of the states were the evil results of despotism most apparent?

38. Had the despotisms continued could Greece have attained importance as a nation?

39. What state gradually extended its federal authority over the Peloponnesus?

40. What northern state became its most formidable rival?



A YOUNG PRINCE OF COMMERCE.

By Selden R. Hopkins.

CHAPTER III.

ON THE ROUNDS OF THE LADDER.

"WHO was the young man?" asked an excited elderly gentleman dressed in broadcloth. He had reachd the scene of the accident, after Albert and Mr. Goodwin had left the department, to find that it was his own daughter who had so nearly lost her life in a horrible way.

"I can't tell you," answered a bystander; "but I saw the reporter yonder speak to him and also to a gentleman with him."

"Then will you have the kindness to ascertain if the reporter secured his name and address?"

The gentleman, going over to the reporter, in a few moments returned and handed him a card with the desired address; and as the father and daughter went out to their carriage, the reporter said: "Well, probably that young man has laid the corner-stone of his fortune to-day."

"How so?" asked the other.

"Why, that gentleman who sent you to me, the young lady's father, is Crosby the millionaire; he is a generous old fellow, and is not likely to forget this occurrence."

Meantime Albert and Mr. Goodwin had started out on a tour of inspection about the business parts of the city; and at an early hour on the following morning they were on their way homeward.

"It's very strange," said Mr. Goodwin, recurring to the accident for the first time, "that no one felt enough interest to ascertain for the young lady who it was that rescued her from a violent death. I presume it would have been the proper thing for me to have given her your name, but it did not occur to me."

"I am glad you did not," answered Albert, warmly, "for she might have thought it was done for the purpose of some reward."

"I don't know about that. And it might be that the lady would be greatly pleased with an opportunity to reward you, and especially if she knew your condition and circumstances."

But Albert's cheeks glowed at the idea. "I did nothing more than my duty, and I see no reason for rewarding a person for a duty done. I should be glad, of course, to know who she was."

"Well, you probably never will."

Though various subjects came up and were discussed as the fine horses paced along over the good roads, young Vangrift was absorbed with thoughts of the fair, the shops and stores and shipping among which he had been the day before. Through his mind danced visionary hopes of how some day he, too, would be a merchant or a great manufacturer. He did not think so much about the pleasures and excitements of living in a great city like Boston, as of the active business life he had glimpsed in the mills, factories and warehouses. His mind was all astir, though mysteriously and vaguely, for of course from the scenes of a few hours the farmer-boy could form but a weak conception of the influence of commerce upon the social conditions of a people and upon the history of a nation. He had no idea, for instance, of the immense army of workers in this broad field — an army composed indeed of numerous communities — standing between producer and consumer.

[We often speak of producers and consumers as though they were two entirely separate classes, as though a producer could not be a consumer, nor a consumer a producer. But that is a mistake. A producer of one variety of commodities

is a consumer of a different variety. A farmer who produces meats, grains and fruits is a consumer of manufactures and perhaps of a large variety of agricultural product which he does not produce. A planter produces, cotton, or sugar, or rice, or tobacco, but he is a consumer too of the fruits of farm-agriculture, the products of the dairy, of manufactures. The miner produces iron, coal, copper, etc., but he is a consumer too of what the planter, the farmer and the manufacturer produce.]

It is the province of the merchant to buy from one class his surplus products and sell them again to another class who pays an advance upon the first price. From all quarters of the globe the things most needed to add to his daily comforts and pleasures the merchant brings to the very door of the consumer and parcels them out in quantities great or small with the greatest consideration for convenience and economy: his tea from China, Japan, and India; his coffee from Brazil and other South American countries, from the island of Java, from Arabia and India; his sugars and syrups from New Orleans, West Indies, Central America, and from the Hawaiian Islands; his flour from the great grain fields of the Central, Western and Northwestern States; his beef from the grazing lands of Texas, Colorado, Nebraska, Montana, Kansas, Iowa, Illinois and many other States; his bacon and lard from Cincinnati, St. Louis, Louisville, Philadelphia, Baltimore, New York and other cities; his pork from Chicago, Kansas City, Cincinnati, St. Louis, Milwaukee, Toledo, Cleveland, Buffalo and elsewhere; his rice from the South Atlantic States and from China; his spices from the East Indies, India, Central and South America, the West Indies and the Philippine Islands; his cheese and butter from the dairy farms of New York and many of the Middle and Western States, but the choicest varieties from Germany and Switzerland; his cotton and woollen fabrics from the busy looms of England, Germany and the Eastern States according as he may select style and quality, from the cheapest prints at six cents a yard to the fine broadcloth at as many dollars; his silks and satins from China, France, Japan and of late years from looms in the many cities of the New England and Middle States; his linen from Ireland, Germany, England, Scotland and some other countries; his leather according to quality, the hides coming from the Western, Southwestern, and Northwestern States, from South America, and from India. These ever-busy traders travel through the chief cities of Europe, Asia, and Africa to search out and bring to the doors of the well-to-do purchaser beautiful china, glass, wood, metal and willow wares of every known device and description. They load ships with rich gems, marvellously-woven mats, rugs, shawls, and carpets, delicate laces, and fun-making toys, peculiar ornaments, melodious instruments, warm furs, and attractive feathers, and transport them across the seas that who desires may be given an opportunity to buy, but they oblige no one against his wish and taste to purchase or examine. Of course Albert could have no conception of this great network of commerce, of the intricacies of the service performed by merchants and dealers; nor could he weigh the importance of commerce to every person, the rich and the poor.

But in the absence of the tradespeople let *us* suppose the washerwoman who must procure a dime's worth of indigo to find an accommodating person who will undertake to procure it for her. What is necessary for him to do? He must charter a ship and despatch it to India. On arriving at Calcutta a messenger must be sent into the interior where he shall find the indigo growing. Here, as no one was expecting a buyer, he waits for some plants to be gathered and the leaves put through the regular process of soaking and fermentation in a vat. After waiting ten to fourteen hours, during which time the proper manipulation has prepared the leaves to be taken out, the liquor is drawn off, filtered and distilled. At the end of two or three days the messenger procures an ounce of indigo and returns to the ship where he and his purchase are taken safely on board and conveyed back to the United States. Reaching New York, he must see his dime's worth of indigo through the hands of the custom-officers, and he then may convey it to the waiting washerwoman. Should she not feel that somebody has done her a remarkable service for a dime? But the merchant foresees the want of the washerwoman and procures in advance of her need the very article she wants, and keeps it until she is prepared to buy.

Such is the special province of that vast con-

course who are looking after the wants of their fellow members of society — of that all-pervading class, from the small establishment at the country-cross-roads where the farmer purchases from the same dealer food, raiment, books, medicines and an endless variety of commodities required upon the farm and in the home, to the immense establishments of the importers, exporters, wholesalers, ship-owners, railroad corporations, telegraph and insurance companies, bankers, brokers, and factors of many kinds. What a vast array of complicated machinery! What an amount of human agency constantly at work! It meets one everywhere, on land, on sea, in the air and under the mountain, so intricate, that the mind shrinks from an effort to encompass it! But Albert's thoughts, although stirred by some dim idea of these vast activities of commerce, turned upon his own fortunes. He felt it was possible that he should succeed in life, and make a comfortable home for his little sisters and brother.

Yet although everything had passed off so happily, and the family at Farmer Wharton's were so kind and so thoughtful of his pleasures and enjoyments, and though his ambition had been awakened, Albert was sad and melancholy that night. It was when he fully realized these kindnesses that he thought most about the loss of his own dear father and mother. It had now been more than a year since the ship was lost, yet the boy had never been able to reconcile himself to fate, and he often dropped to sleep in tears.

However, the next day he was up brisk and early and went to his work with a new earnestness and enthusiasm, even though it was no step toward that employment which would be congenial. He felt full of courage and energy and patience; and though his work was husking corn, instead of buying and selling corn, he husked with a will.

A few days after that Mr. Wharton, who had been to the village, brought Albert a letter.

"A letter for me?" queried the boy as he took it, giving the envelope a look of astonishment.

"Perhaps it would explain itself if you should open it," said Mr. Wharton as the boy still stood holding it, trying to imagine who could have written a letter to him.

"It isn't from the children sure," he said. "No one there writes like that. Perhaps it is for somebody else, Mr. Wharton, who has the same name; though that can't be. I'll open it anyhow."

Carefully breaking the seal he took out the sheet of paper, unfolded it, and read:

— Beacon St. Boston.
27th September.

Master Albert Vangrift,

My Dear Young Friend:

Enclosed herein you will find my cheque to your order for one hundred dollars. This is but a partial acknowledgment of your brave and thoughtful act in rescuing my daughter from a perilous danger at the Fair.

I shall be glad to hear from you and it will afford me a *great* pleasure to see you more fittingly rewarded.

When you or any of your family come to Boston it is the wish of Mrs. Crosby and myself that you would make our house your home while in the city.

My daughter recovered very soon from her fright, and desires to express her heartfelt gratitude to you that she is now alive.

Hoping for a prompt response,

Your sincere friend,

Joseph Crosby.

Albert was astonished. He looked from the letter to the check, from the check back to the letter. "Father," said he at last, handing the small piece of paper to Mr. Wharton, "do you suppose this is meant to be the same as a hundred dollars?"

"It is a check for a hundred dollars, sure," said Mr. Wharton, examining the paper closely, "but I don't understand what it all means, Albert."

Then Albert explained more fully than he had done before about the accident at the fair. He had alluded to it so casually that it had not been especially noticed, and he had not told many particulars about the rescue.

"What had I better do about it, father," he asked, as he turned the check over and over. "I suppose I must return it, must I not? and what should I say as to not wishing to take a reward?"

"*I* think, Albert," said Mrs. Wharton, "that it would not be proper for you to return the check. You may rest assured it is a great pleasure to that man to give it. You should write to say you have received it, and at the same time tell him you were sufficiently rewarded in your own feelings, and that you had never thought for a moment that he had been placed under obligations. Write him your thanks for the gift and tell the kind man that the money will be of great service to you and to your little brother and sisters."

"Will I be able then to get the money for the check here, do you suppose?" asked Albert, "or must I send it to Boston to get the cash. I wonder why he sent a check anyhow?"

"O, no, Al, you can get the money for the check at the Corners. Mr. Harwood, the merchant, will give you the money for it. He can remit the check to Boston instead of money in payment for goods. It is really better to him than money for that purpose. Mr. Crosby knew this, or he would have sent you the money by express."

[Checks are frequently sent in the mail instead of money which, to be secure, should go by express. But they are not *always* preferable to money for use in remitting. In this case the check was better than the money, because it could be sent at less expense by the country merchant, who must forward money to Boston if he had nothing to send which would serve the same purpose. But if no person at Williston Corners desired to send money to Boston it would be necessary to send the check there for collection and have the money sent out. This is an instance where we get an idea of what is meant by a "balance of trade." The balance of trade in this case was in favor of Boston. We mean by that, that there was more money naturally going from this place into Boston than was coming out, and consequently the business could not be done by a simple exchange of checks. Boston was shipping more in goods to the country merchants than they were sending in produce and supplies to Boston. Had it been the reverse, as it often is in country places, Boston checks would have been plentiful and persons who accepted them would then charge a small commission for collecting the money in Boston. This commission is called in banking "premium on exchange."]

Albert wrote a courteous reply to Mr. Crosby's letter, and, by the advice of both Mr. Goodwin and Mr. Wharton, gave in it a brief history of himself. To this he received a fitting answer, which assured him that he would always possess Mr. Crosby's friendship, and that at some future time a personal acquaintance must follow.

It was shortly after this, that an interesting question was put to Albert.

"How would you like to work in a store, young man?" asked the merchant Harwood one day when Albert was in his store.

"I believe I should like it very much indeed," was the reply. "I have often thought I should some day be a merchant, but as yet I feel I ought to try and get a better education."

"Then how would it suit you to work in my store mornings and evenings and attend school during the day? I don't know as I could give you much more than your clothes and board for the winter, but perhaps such an arrangement as that even, would prove an advantage, considering your future prospects."

"Well, I can't give you an answer to-day, Mr. Harwood," was Albert's thoughtful response. "I must first talk with Mr. Wharton, and see if I can be spared and if he thinks it would be best."

But the arrangements were made. The fact was that Mr. Wharton and Mr. Goodwin had proposed this idea to the merchant, the three men in common with many others in the community being greatly prepossessed in favor of the stranger-lad who little dreamed of the hands that were ready to help him on, should opportunity present — no boy of sterling qualities misses of the notice and appreciation of sterling men.

Young Vangrift had sent the hundred dollars received from the check sent by Mr. Crosby to his aunt, in whose care were his sisters and brother; and now he added to this nearly as much more given him in his settlement with Mr. Wharton. He was inducted into his duties at Mr. Harwood's store and pleasantly settled at the Academy in Williston's Corners and he had a glad feeling that he was the right boy in the right place. His work in the store the first year was waiting upon customers and making up packages. But by the second year he had shown such business tact and judgment that Mr. Harwood had promoted him to a position in his office. In this new field he at once begun upon the study of business principles and methods. His employer was a clear-headed business man, who had established himself upon a good foundation of resolutions and views made in his most calm and reserved hours of thought. His ventures had been generally successful, and he was quietly accumulating a fortune. Advanced in years, he was now beginning to feel the need in his enterprises of just such young, fresh, eager life and spirit as he believed young Vangrift would eventually develop.

"Albert," said Mr. Harwood one day, "do

you still think you would like to become a merchant?"

"I dô; yes, sir. At least I would like to be an active business man of some sort — a merchant, or a manufacturer. I should prefer such a life to that of a farmer or to following any of the learned professions that I know anything about."

"Well, sir, to be a successful business man there are many things you must study; and not only study, but which must be engrafted into your habits and character. I am interested in you because I believe you can succeed, and in many of these things I shall try from time to time to instruct you. And one of the first to which I call your attention is the subject of credit. It is a most delicate intricacy, and it has to be considered by a business man until his wisdom in that direction amounts almost to intuition. You have probably noticed that of every one hundred dollars worth of goods sold out of my store about eighty or ninety are charged to somebody. There is comparatively little business done in a general country store of this kind for immediate cash."

"But would it not be better, Mr. Harwood, to refuse goods to people who do not pay cash?"

"Ah, there is a question. It might be true of some buyers. But it has been found that a purely cash store is never well-supported in a farming community. There are, in fact, but a few places where merchants can hold themselves strictly to a cash business; never in agricultural communities. In the large cities a good share of the retail business *is* upon a cash basis. But even there the cash trade forms but a small part of the whole business. Credit, I may say, is the foundation of commercial enterprise. It is an element which underlies all business transactions. Buying on credit has been the prevailing custom so many years that it has become one of the fixed conditions of trade. It might be better for the people if it were not so, but it is not the plan of shrewd business men to undertake a reformation of the customs and habits of the people when the reformer must inevitably suffer a pecuniary loss by his reform measures. The work of political economists is not profitable employment for merchants. I accept this state of business, therefore, with my fellow-merchants, and the next generation of merchants will probably do the same."

"How often do customers generally settle their accounts, Mr. Harwood, in country stores? I see that many of ours do not settle oftener than once in six months. Isn't that a long time?"

"It is far better now in that respect than when I first engaged in business. Then, say twenty to forty years ago, no person in a community like this thought of paying his account oftener than once a year; and in many cases it would stand two years without a settlement. We got down after a while — "

"Mr. Harwood," sang out a voice in the front part of the store, "messenger here with a telegram!"

"Right back that way, in the office, you'll find him," came from another voice in the central part of the long building.

(TO BE CONTINUED.)

WAYS TO DO THINGS.

By Amanda B. Harris.

LII.

ONE LADY'S WAY OF TEACHING "HOW TO WRITE COMPOSITIONS."

PROBABLY not one of the pupils of a laughing-eyed, brilliant brunette who once taught a select school for girls in the dancing-hall of a certain old country tavern, will ever forget the captivating and novel way she had of initiating her pupils into some of the mysteries of putting words and sentences together. She did not say it was "writing compositions," and they did not know it; if they had, no doubt every idea would at once have fled from their brains, and they would have said they could not do it, they did not

like to, they did not know how, and they wished that "compositions" could be abolished from the school system — for did you ever know more than one pupil out of ten, who did not detest, or in the pupil's language, "hate" the very word?

She began by giving us a few simple words, mostly nouns and adjectives, asking us to make at least a single sentence. That was a mere nothing, we thought; and it was nothing to analyze what we had written, parse the words and give the grammatical rules; nothing to explain the construction, and criticise it. It never entered into our heads that we were being led on with reference to future essays and sketches; that in this artful, insidious and progressive manner we were being taught how to "write compositions," the use of words, and the meaning of language.

Soon she increased the number to eight or ten, taking several parts of speech, requiring us to write as many lines (and more if we wished to), in which they should be used, and used properly; and it became fine entertainment to us to hear the specimens read by the several authors or experimenters. It was one of the regular school-exercises, and we all were delighted and eager when the hour came for it just after the afternoon recess. The "compositions" — for they speedily attained that dignity — were not very brilliant, but we were young and without much experience, and in those days it was not the case that girls had such a gift of writing as they appear to have now.

Here is one of the moderately easy samples: she gave the words "cottage," "glad," "children," "as soon as," "home," "play," "come," "shadows."

"Now," she said, "you have places, persons, time; you have nouns, adjectives, and one verb, or two, as you choose. What will you do with them?"

One girl disposed of the matter as briefly and with as little adornment as possible:

> How glad the children are as soon as school is done to come home to the beautiful cottage and play in the shadows of the trees!

Another wrote:

> Whenever I can find the opportunity I am very glad to come away from the noisy city to the peaceful cottage in the beautiful country which was my old home, where I was wont to play with my dear brothers and sisters when we were innocent children. I take a comfortable carriage as soon as I can, late in the afternoon, and reach the place just at the time most pleasant to me, at the twilight hour when the shadows of evening are beginning to fall.

That was thought in the school (the teacher's opinion not expressed) to be equal to anything in Irving's *Sketch Book*, and we were sure that girl would become a distinguished writer.

One more:

> One beautiful afternoon in spring, when everything was so fresh and green that we liked to be out doors, we took a long walk to a cottage where there were some children who were our cousins. They were at play under the shadow of the trees in front of their home, and as soon as they saw us, they all called out "O, how glad we are you have come!"

The teacher here called our attention to the circumstance that one had written "*in* the shadow," and the other "*under*," and asked if both were proper.

The first really perplexing exercise was when she required us to write a paragraph in which should be the words "meadow," "farmer," "exceedingly," "day," "occurrence," "noticed," "working," "dog," "sunny," "unexpected."

We began as bravely as possible, about a farmer working on a meadow, but presently every one found a hitch in the skein that had at first been run off so smoothly.

After about five minutes of writing and erasing, of trial and cogitation, of bewilderment and final desperation, every hand went up.

"What is it?" the teacher asked, with mischief in her eyes.

Trouble about the "unexpected," and "occurrence." It was not possible we said to use them both, unless we wrote a whole book, or at least a good long chapter of one. We could not say "an unexpected occurrence *occurred?*" "O, no!" Or that "an unexpected occurrence *took place?*" "No, that will not do!" Or that "an unexpected occurrence *transpired?*" "O, no, no!" Or that "an unexpected occurrence *happened?*" "No, no, no!" Or that "an unexpected occurrence *come to pass?*" "Worse and worse, and worst, if possible!"

Then she explained the meaning of each of those words and showed us why they could not

be put into any of the relations we had proposed; that one who wished to use the English language correctly and with good taste would hardly have an occurrence occur, take place, transpire, happen, or come to pass. "But, why," she asked, "did you all take it for granted that 'unexpected' must necessarily belong with 'occurrence?' That is the most amusing thing to me — that twelve girls should have thought alike and stumbled there. Why need you put the words together? As you find it so troublesome to manage them in that way, why not use them separately?"

And we were given another quarter of an hour.

At the expiration of that time the compositions were read; eleven of the twelve pupils had made very pretty incidents, but lo! five had left out "unexpected," and six, "occurrence." The twelfth read as follows:

> One sunny day as a farmer was working on his meadow he suddenly noticed that his dog was acting in a strange manner. Though exceedingly busy, for he had been delayed by some occurrence at home, he dropped his scythe and went some distance to the place where the animal was to be seen running about in great excitement, as if something unusual and unexpected had happened.

Here it came to an end.

"Well, what did happen?" asked the teacher.

"Why, nothing, only I put all the words in."

"To be sure; but really you have begun a story, something *must* have happened; something *did*. Now invent something. I know you can if you try. Surely you will not leave that dog acting so strangely. We shall never know whether he had gone mad, or found a treasure, or was only barking at a woodchuck."

Now the result was that each of the other girls, inspired by the success of this one, set to work and actually wrote a sketch of moderate length in which all the words came in properly, while the fortunate first one produced a fresh little narrative which was quite thrilling, telling how the little boy from the house had followed his father unobserved, and dropping asleep among the bushes on the edge of a brook, would perhaps have been drowned but for the dog. To heighten the effect, she pictured the meadow with its tall grasses, and lilies in bloom, and also introduced the fact that the house was in sight, that it was a red house and that it had a latticed porch over the door.

The teacher criticised this production, and said that an experienced writer would have found some better way of telling us that the farmer was haying; however, it was a very good piece of work, and we could see that the story might be made to expand still more. The other pieces were taken in turn and fully discussed. Our inventiveness was encouraged, and we were advised to use the simplest and most direct words in describing anything. "Avoid," said she, "what is called *flowery* writing. To illustrate what I mean: if you saw your neighbor's house all in a blaze you would not be likely to say 'That mansion is enveloped in flames,' but 'That house is on fire.' Then write it so."

To vary the exercise, and teach us to be discriminating in the use of words, she used to give us two or three verses from some poem, omitting most of the adjectives or descriptive words, and we were to fill the blanks with such as we thought the meaning required. In the course of those two terms of school there was a good deal of botching of some of the lines of Mrs. Hemans, Byron and Sir Walter Scott which would have driven those authors frantic. I remember that one girl presented her slate with the line

> "I have had my share of *thunder* shocks,"

as a substitute for

> "I have had my share of earth's rude shocks,"

and how the school as well as teacher laughed when she read it at the top of her voice.

Mrs. Hemans was new to us and, as she abounds in descriptive epithets, we fairly revelled in her poems, and vied with one another in our endeavors to catch the sense with the many words left out. After the teacher had explained the purpose of the verse given, we tried our skill at supplying, making more misses than hits. Once we had the verse beginning:

> I have sent through the wood-paths a glowing sigh
> And called out each voice of the deep, blue sky;

and there were all kinds of "sighs" but the right one; the sky was "sapphire," was "azure," was "bright blue," was "dark blue," was "clear blue," anything but "deep."

It was very amusing, it was very delightful, it

was helpful; and, looking at the subject after so many years, I am positive that those most artistic and poetic among the girls did sometimes (Oh! shade of Mrs. Hemans, dare I say it?) fit a more appropriate adjective or participle in more than one line of "The Voices of Spring" and similar poems than the author herself had selected.

New to us was Sir Walter too; and our introduction to him was through *Marmion*, thus:

Day set on Norham's castled steep,
And Tweed's fair river, broad and deep,
 And Cheviot's mountains lone:
The battled towers, the donjon keep,
The loop-hole grates, where captives weep,
The flanking walls that round it sweep,
 In yellow lustre shone.
The warriors on the turrets high,
Moving athwart the evening sky,
 Seemed forms of giant height:
Their armour, as it caught the rays,
Flashed back again the western blaze,
 In lines of dazzling light.

And, instead of adjectives every verb was left out, and besides supplying them, we must have them rhyme, but we succeeded admirably, and from that day on we loved Scott. How his lines used to ring out, as she would recite them, after hearing our versions, and all of chivalry and romance were in the air.

It was a profitable kind of exercise in many ways, for it opened a new world to us, stimulated us, made us fastidious about the poetry we read, besides helping us to a critical judgment — though to this day, let me confess, I can never read any of the special poems we maltreated in those school days without falling to questioning whether this adjective or that is the better one.

To have *dared* meddle with Scott, you will exclaim! How *could* you?

But try for yourselves. Have some older person give out line by line, on the above plan, verses that you are not acquainted with, and you, too, will dare, and be delighted with this novel "way."

SOME SUCCESSFUL WOMEN.

By Sarah K. Bolton.

III.

FRANCES E. WILLARD.

A LITTLE way out of Chicago, in a pretty home called "Rest Cottage," at Evanston, lives Frances E. Willard, one of the best-known and best-loved women of our country.

Another woman lives in the cottage, Miss Willard's mother. In her eighty-second year she is still the inspiration of those who are much with her; still a reader of the best poetry and prose, and interested in the leading questions of the day. On January 3, 1885, this venerable woman had a charming birthday celebration. The cottage was fragrant with flowers, the South sending japonicas and hanging moss; the North, white carnations and roses. Some four hundred friends gathered to do her honor, and messages and gifts came from all over the country. President Fairchild sent sprigs of evergreen from the old tree in front of the early Willard home in Oberlin. Joseph Cook sent "Congratulations to the mother on the daughter's life, and to the daughter on the mother's." Mr. Moody, Roswell Smith of the *Century Magazine*, Dr. Vincent, Maria Mitchell, and hundreds of others, sent cheering words.

No one of all the company was so proud and glad as Frances. No one knew, so well as she, how this good mother who had toiled for her three children, was deserving of this honor. And yet it came because the noble daughter, by her own life, had made the mother known to the world.

Miss Willard has had the rich blessing of Christian parentage. Not all who gain success are so fortunate, and yet it is rare to find eminence where there has not been at least an able mother and of high principles. Her ancestry enrolls names of many who have toiled for the public good. One of the Willards was a president of

Harvard College, another a pastor of the Old South Church in Boston, and still another the well-known educator, Emma Willard of Troy, N. Y. Miss Willard's great-grandfather was a minister at Keene, N. H., for forty years, and a chaplain in the Revolutionary War.

Her father, a native of Vermont, and a promising young business man, after marrying an intelligent girl, also a teacher, started Westward to found a home. The daughter, Frances Elizabeth, was born at Churchville, near Rochester, N. Y. When she was two years old, the young parents moved to Oberlin, Ohio, where for five years they both devoted themselves to study, and then bought a large farm at Janesville, Wis., called "Forest Home." Here for twelve years the girl basked in the sunshine of nature and health. She says of herself:

"Reared in the country, on a Western farm, I was absolutely ignorant of tight shoes, corsets or extinguisher bonnets. Clad during three fourths of the year in flannel suits, not unlike those worn at gymnastics now by young lady collegians, and spending most of my time in the open air, the companion in work as well as in sport of my only brother, I knew much more about handling rake and hoe than I did of frying-pan and needle; knew the name and use of every implement handled by carpenter and joiner; could herd the sheep all day and never tire; was an enthusiastic poultry raiser; and by means of this natural out-door life, eight or nine hours sleep in twenty-four, a sensible manner of dress, and the plain fare of bread and butter, vegetables, eggs, milk, fruit and fowl, was enabled to store up electricity for the time to come.

"We three children were each promised a library to cost one hundred dollars apiece if we would not touch tea or coffee till we became of age. Subsequently I used both for years, very moderately, but have now entirely discarded them. A physician was almost an unknown visitant to our home."

The common-sense mother said, "Let a girl grow as a tree grows — according to its own sweet will."

"Forest Home," says Frances, "was a queer old cottage with rambling roof, gables, dormer-windows, and little porches, crannies, and out-of-the-way nooks, scattered here and there. The bluffs, so characteristic of Wisconsin, rose about it on the right and left. The beautiful Rock River flowed at the west side; to the east a prairie stretched away to meet the horizon, yellow with grain in summer, fleecy with snow in the winter."

But there were all sorts of intellectual feasts in this plain home. Frances, and her lovely sister, Mary, each not far from twelve years of age, organized an "Artist's Club" of two. They would lead up the willing goat, put panniers on his back, packed with lunch and a bottle of spring water, and then with two shepherd dogs in the procession, wander off to the river bank where they would sketch the whole day long. Sometimes the frolicsome girls tried "to train a calf into a riding-horse," but were not rewarded with great success in this novel undertaking. At other times they caught Jack, a favorite horse, among the hazel bushes and enjoyed a horseback ride.



FRANCES E. WILLARD.

At fourteen when a new schoolhouse was built in their locality, Frances went to school for the first time, the parents and a bright young lady in the family having been her teachers heretofore. She writes in her journal:

"Sister and I got up long before light to pre-

pare for the first day at school. We put all our books in mother's satchel; had a nice tin pail full of dinner. Stood next to Pat O'Donahue in spelling, and Pat stood at the head."

Next the girls started a newpaper, with poems, essays and stories. The "news" must have been meagre, but such as it was it was greatly enjoyed by the public; which public consisted of the father and mother! At sixteen Frances received a prize from the Illinois Agricultural Society for an essay on "Country Homes." Mr. Willard was deeply interested in agriculture, having been president of the State Society, as well as a member of the State Legislature, and was of course pleased at his daughter's work and success in this field.

On her seventeenth birthday she says in her journal: "This is the date of my martyrdom. Mother insists that at last I *must* have my hair 'done up woman fashion.' She says she can hardly forgive herself for letting me 'run wild' so long. My 'back hair' is twisted up like a corkscrew; I carry eighteen hair-pins; my head aches, my feet are entangled in the skirt of my new gown; I can never jump over a fence again so long as I live. As for chasing the sheep down in the shady pasture, it's out of the question, and to climb to my 'Eagle's Nest' seat in the big burr-oak would ruin this new frock beyond repair. Altogether, I recognize the fact, that 'my occupation's gone.'"

A year later she was sent to Milwaukee College, founded by Catharine Beecher. The Willards now saw the necessity of going to some town where the children could be more fully educated. The farm was therefore sold, with a reluctant good-by to the goat and the poultry, and the family moved to Evanston, the seat of the Northwestern University, where Mr. Willard became a partner in the Chicago banking-firm of Preston, Willard & Kean.

Both daughters entered the Woman's College, and graduated with honor. For a girl with Frances's energy, the ending of school was but the beginning of a career of work. She had a pleasant home, and a father able to support her, but why need she be dependent upon him? Should she stay at home and wait for marriage? No; she would earn money for herself, and marry or not, as her heart prompted.

A country school was found near Chicago, in which the young teacher began her labors. Then a position was offered her in Evanston, as teacher of natural science in the college whence she had graduated. After this, she was called to the Female College at Pittsburg, Pa., and later on became Preceptress in Genesee Wesleyan Seminary at Lima, N. Y.

Meantime a great sorrow had come into her life — the death of the beautiful and gifted sister Mary; and a few years later, the father and only brother, Oliver, died, and Frances and her mother were left alone.

While teaching in Pittsburg, Miss Willard wrote her first book, a memoir of Mary, called *Nineteen Beautiful Years*, which was published by the Harpers in 1864. This book has made thousands better from reading it, and will continue to do its elevating work in the years to come. A new edition has lately been brought out with an introduction by the poet Whittier.

In 1868, a great blessing came to Miss Willard. Her friend, Kate A. Jackson, took her abroad for three years as her guest. They travelled in nearly every European country. In Greece and Palestine and Asia Minor they found much to study and enjoy. They climbed the pyramids and visited the treasures of art in Italy and Germany. While absent Miss Willard devoted more than a year to study in the College de France and the Petit Sorbonne, attending the lectures of Guizot, the historian, and other famous men; she also studied in Berlin and Rome. Her training went constantly on. Whenever she could command time she wrote articles for the *New York Independent*, *Harper's Monthly*, *Christian Union* and the Chicago journals. It was probable, of course, that a girl who thus preferred work to pleasure, would become a successful woman.

On her return home, a new point of departure almost immediately confronted her. She spoke before a Woman's Missionary Meeting upon the Christian work done abroad, and so impressed was a prominent gentleman with her ability as a speaker, that he proposed to her that she should give a lecture, promising her a large and appreciative audience. Hesitating much to try her powers, she laid the matter before her mother, asking if she should accept. "By all means, my child," said she; "enter every open door."

"At the expiration of three weeks, and with

no manuscript visible," says Miss Willard, "I appeared before an elegant audience in Centenary Church, Chicago. The manuscript was with me in portfolio, ready for reference in case of failure, *but I didn't fail.*" So pleased were the people and the newspapers, that she at once received invitations to lecture from all parts of the Northwest.

Honors now came fast and thick. In 1871 she was made President of the Woman's College at Evanston, her Alma Mater, and two years later, when the college became a part of the University, she was made Dean of this college, and Professor of Æsthetics in the University. She adopted a plan of self-government for the pupils, novel then, but since used, substantially, at Amherst College and elsewhere. When any girl had shown herself worthy, she entered a "Roll of Honor Society," and if her record was good for a specified time, she joined the "corps of the self-governed" with a pledge to act her best. Miss Willard, the teacher, has proved an inspiration to more than two thousand pupils; her always recurring question to them being, "*What are you going to be in the world, and what are you going to do?*"

In the winter of 1873 there was a remarkable uprising of the Christian women of the land, known and remembered as the Temperance Crusade. Tens of thousands, in praying-bands, visited the saloons, and awoke the whole country to the peril of a drinking habit well nigh universal, and to the sin of the liquor traffic.

Miss Willard was asked to join the movement. She was already a successful teacher, author and lecturer. Would she now please give up literary and educational reputation, and the brilliant prospects of her life, and enter upon a lowly and unpopular work? Better than art or literature she had always loved to see a human being helped upward. She once had said, "The deepest thought and desire of my life would have been met, if my dear old Mother Church had permitted me to be a minister." Yes, she was immediately and wholly ready to aid the temperance women.

She was made the National Corresponding Secretary of the movement, and at once began the work that has been an astonishment in its breadth and a blessing to hundreds of thousands. Her grand faculty for organization developed and made itself manifest. She determined to herself to visit and speak in every town in the United States which numbered ten thousand inhabitants — and she afterward included many of five thousand — in order to organize a Woman's Christian Temperance Union in each if it had not one already.

Was this a possibility? She had little money and a constitution not robust. But she had what was better, a heroic purpose, and great faith in God working with man.

For ten years she spoke, on an average, once a day, staying at "Rest Cottage" only three weeks during each year; sent out in the later years twenty or thirty thousand letters; travelled some years, from twenty-five thousand to thirty thousand miles, accompanied by her invaluable private secretary, Miss Anna Gordon, whom she truly calls her "right arm," writing nearly all her speeches and articles for the press on the cars. The wonder is that she is not a broken-down woman, which indeed she doubtless would be were it not for her sunny disposition, her common sense, her power of holding herself at an even pace, and nature's early gifts and endowments in the free life at Forest Home.

She herself says: "The chief wonder of my life is that I dare to have so good a time, physically, mentally and religiously. I have swung like a pendulum through my years 'without haste, without rest.' What it would be to have an idle hour I find it hard to fancy. With no headache why should I not think right straight ahead?"

It is largely through Miss Willard's efforts that in the whole thirty-eight States and nine Territories, W. C. T. U.'s have been organized. In ten thousand towns and cities a great body of women are at work to make liquor-selling and liquor-drinking, with their consequent ruin to men and their families, hateful and disreputable before the world. Especially have the people of the South become enthusiastic over the settlement of the temperance question. Miss Willard has made four campaigns in that great section of our country since 1880 and has been welcomed into the most important pulpits, and sustained by those in the highest positions.

The Woman's National Organization has now over thirty departments. It has for its organ the *Union Signal*, a bright sixteen-page weekly paper, with a large subscription list. In twenty States, temperance text-books have been introduced into

the public-schools by law. The press department reaches over one thousand papers, and sends out annually over five million pages of printed matter. The W. C. T. U. has commissioned Mrs. Mary C. Leavitt, of Boston, to journey round the world perfecting kindred organizations in India, China, Russia, Scandinavia, and other countries. Many of the States are working for Constitutional Prohibition already obtained in Maine, Kansas, Iowa and Rhode Island, and for the ballot for woman, in the power of which Miss Willard heartily believes, since the liquor-power would thus be met by the "force of numbers." Miss Willard has now been the President of the National Association for seven years.

For the next ten years, Miss Willard hopes, if she lives, to use her pen even more than her voice, remaining much of the time at "Rest Cottage." Here she has fitted up a great workshop; and to a friend who asks what she is doing now, she replies, "I have the care of four departments of the National W. C. T. U., and the general supervision of the whole, viz.: the World's W. C. T. U., National Literature, White Cross League, and the extension of the organization. Each would be too much for seven women; I only make a dash at each." But those who know Miss Willard, know her thoroughness. She is usually at her desk from nine till six, with a half-hour for dinner, and another half-hour for exercise in the open air.

A well-known lady in Evanston, Miss Willard's home, writes me concerning her: "To human observation, here, Frances Willard is without fault. Her liberality is unbounded, or would be if her purse were as big as her heart. Her own private expenditures she reduces to a minimum, going without what she actually needs, in order that those in want may never be refused. . . . In her immense and ever-increasing correspondence, there are the usual number of cranks and bores. But *every* letter is answered, and courteously. When remonstrated with on account of the time and strength it takes, she replies, 'I like to have them write to me. I want to get at the temperance work in every possible way, and at the hearts of people. Perhaps it cheers some poor soul to write to me and get a reply. Let us comfort one another all we can.'"

Another prominent lady writes: "Miss Willard's life will bear the closest scrutiny. So conscientious is she in her correspondence for the National Society that altogether she sometimes has ten secretaries at work; even an envelope or a sheet of paper is never wasted. This cannot always be said of men in the Government or Church or Missionary employ! She is heart and soul and body, given, a living sacrifice, to the work of saving men. She invites to her home those who have been overcome by temptation. Rarely is a social invitation accepted, although invited by the best and the greatest, unless it be where she can do some work. She is a marvellous woman, great, and will be greater." She receives no remuneration from the Society except that it furnishes postage and stationery.

The White Cross League, instituted by the Bishop of Durham, in England, pledging equal purity for man and woman, bids fair to be one of Miss Willard's grandest lines of work. She has, with all her other labors, been writing some excellent articles to girls, in the *Chautauquan*, on the subject, "How to Win." She says:

> "Keep to your specialty, whether it is raising turnips or tunes; painting screens or battle pieces; studying political economy or domestic receipts. . . . Have in place of aimless reverie, a resolute aim. The first one in the idle stream of my life was the purpose, lodged there by my life's best friend, my mother, *to have an education*. . . . Margaret Fuller Ossoli was another fixed point — shall I not rather say a fixed star? — in the sky of my thought, while Arnold of Rugby, to one who meant to make teaching a profession, was chief of all.
>
> "If my dear mother did me one crowning kindness it was in making me believe that next to being an angel, the greatest bestowment of God is to make one a woman. . . . If I were asked the mission of the ideal woman, I would reply, *It is to make the whole world homelike*. . . . She came into the college and elevated it, into literature and hallowed it, into the business world and ennobled it. She will come into government and purify it, for woman will make homelike every place she enters, and she will enter every place on this round earth."

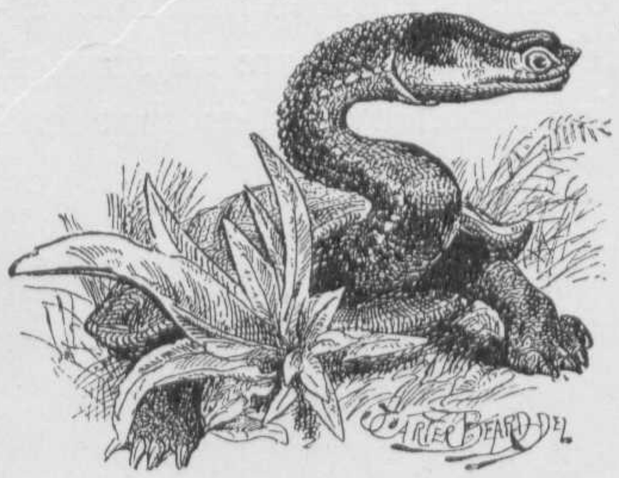
Miss Willard has come to her grand success chiefly because of a high purpose. Life has been for her a constant work-day since she sketched with Mary by the riverside at Forest Home, and every day has told upon the future of our people. For constantly working in advance of all party-lines, she has helped more than any other woman first to make a great issue and then to hasten it into national consideration.

WONDER-WINGS, MELLANGONGS, COLOSSI, AND OTHERS.

By C. F. Holder.

III.

FRESH-WATER TURTLES.



THE HYDRASPIS.

SOME interesting features are presented by turtles. They differ entirely from all other animals. They are enclosed in a shell, into which many withdraw entirely. If we examine one we see that it has two distinct shells; the upper, or carapace, and lower, or plastron, which united form the box or house in which the animal lives. The backbone, or vertebra, is joined firmly to the upper shell, consequently has not the flexibility seen in other animals. The ribs also are immovable, and the carapace, or upper protecting shell, is really formed by the widening of these bones. In the mouth of the turtle we find two horny beaks in the place of teeth so that they nip and crush, instead of cutting their food. Their eyesight is acute, these organs having a third lid, or what is called a nictitating membrane. In America, north of Mexico, we have about forty species of these interesting animals, and they are found in almost every country that will support life.

The true fresh-water turtles of the world belong to the order *Emydidæ*, and are represented in various climes by over sixty species, or different kinds. They differ materially in appearance from sea turtles. They have a more or less depressed shell, though in some cases it is convex. The toes are distinct, and provided with webs, and the limbs are organized so that the turtles can lift themselves some distance from the ground and travel with considerable speed. The shell is often brilliantly ornamented, and a thorough protection, being made up of horny shields. They are generally found in ponds and streams, resting on logs or sand-bars, while some wander far into the woods in search of food. Their eggs are, as a rule, oblong, and buried, as are those of the marine forms, in the sand alongshore, to be hatched by the sun.

Perhaps the most familiar form is the box-turtle, *Cistudo*, found almost everywhere in the United States east of the Mississippi River. It is independent of the water, and commonly discovered roaming through the woods in search of mushrooms and toadstools. It is particularly interesting from the fact that it can shut itself completely in its house or shell, the plastron having two lids joining like a cover.

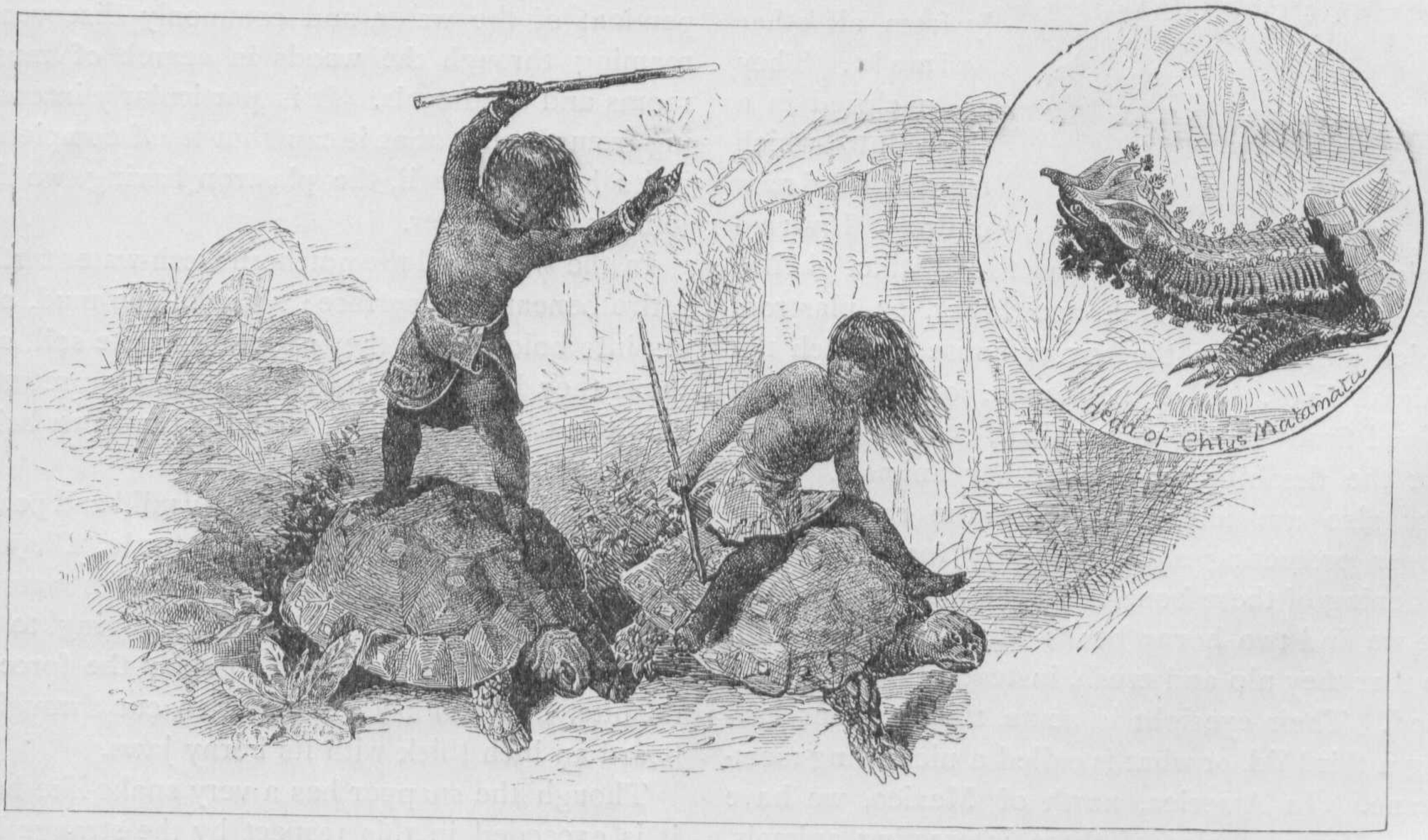
In the winter all the northern fresh-water turtles retire beneath the surface; some in the mud, others into holes which they excavate in the soil, and there they hibernate until warm weather returns, neither eating nor drinking, all the functions being at a standstill.

While the box-turtle is extremely mild and peaceful in its disposition, the snapping turtle, *Chelydra serpentina*, is a veritable bull dog in its nature; striking with its powerful head, clinging to its enemy with persistency, and to show the force of its bite, one has been known to cut through a board an inch thick with its horny jaws.

Though the snapper has a very snake-like head it is exceeded in this respect by the strange Hydraspis which has a slender neck nearly as long as its shell; so long, in fact, that it does not draw in its head like ordinary turtles, but places it on the side of the body. When these turtles, swimming just under the surface, lift their heads above water to reconnoitre, the observer would consider them snakes. They are confined to the rivers and streams of Brazil where the curious bearded or imbricated turtle, *Chelys matamata*, is found, the most remarkable of the entire tribe. This turtle attains a length of three feet, has a long neck ornamented in a most wonderful manner with barbels and fringes of flesh, so that one can well imagine that it had been overgrown with moss or weed.

On each side of the head are two curious prominences that look like ears; above the mouth is a pointed nose-like extension of the skin; add to this a shell resembling rough rock, and we have a creature which certainly must find much protection in its resemblance to moss-covered rocks.

Some remarkable turtles, as regards size, are found on the islands of the Galapagos Archipelago; these are known as elephant-turtles. There are several species, and when the islands were first discovered they existed in great numbers, but since then many have been killed, and vessels stop there to capture the huge creatures as a marketable commodity. These islands are of volcanic origin, and contain many extinct craters and cones, in and about which a growth of cactus is found. When the original discoverers visited Chatham Islands, they found curious paths leading up to the mounds, winding in and out among the cacti; by following these up they soon came to a number of large springs, in a muddy basin, wallowing in which were scores of monstrous turtles. Some were drinking, while others had evidently just finished and were walking slowly away down the well-travelled paths. When approached they suddenly drew in their legs and dropped with considerable noise, at the same time uttering a loud hiss. Their size and strength can be imagined when it is known that two men could sit on the back of one, the animal carrying them with ease. I have stood upon the back of a young one hardly two and a half feet long, and the animal moved without difficulty. These huge creatures are very fond of water, and go periodically to the springs, evidently obtaining a supply sufficient to last them some time. Undoubtedly they are not dependent upon it, as on some of the islands no rain falls except during a few weeks, and there are no springs, yet the islands are inhabited by turtles that feed upon the cactus. Besides the hiss that all turtles have these roar loudly at times.



A TURTLE RACE.

"Some years ago," said a friend, who was a famous traveller, and with whom I was exchanging turtle experiences, "I found myself up the Amazon so far that I imagine I was the only really white man in the country. The natives and half-bred Portuguese held undisputed possession. I was well received everywhere, the people being extremely hospitable, and among the curious things that I noticed was that almost every family kept turtles just as we do pigs. In other words, attached to nearly every little house was a pen or corral in

which one or more turtles were confined as the family meat-supply, and killed as occasion required. The turtles, *Podocnemys expansa*, were extremely large, some weighing two hundred and fifty pounds, and were three feet in length, and proportionately stout and bulky. I found that they formed one of the most important articles of diet in the country, and many of the natives earned a living by catching and selling them to the richer people.

"My first glimpse at these huge turtles was at a small hut where I observed a child sitting in a bath tub made of the shell of one, and this led to my becoming acquainted with the originals, for my host observing my interest in the animals told me that a regularly-organized hunt was to take place in a few days, and as his men were going he invited me to join them. On the morning of the hunt we went to a little settlement about five miles up the river, and there waited for the entire party, the members of which were arriving every minute in their canoes in fours and fives. Having some time to wait I went ashore and strolled about, and at one of the houses I found that the turtles in their usefulness were not restricted to food but were utilized by the native children as perambulators. Hearing a shouting in one of the corrals I looked over the fence and there were two little urchins, each mounted on a large turtle, and evidently racing, as each rider sat astride of the shell, and with a piece of bamboo split at the end urged the phlegmatic steeds along at a pace which might have been a mile a week, as the turtles aroused at the noise of the blow, would scramble ahead a foot, for it certainly could not be felt; but the moment their heads protruded far enough to see the diminutive rider they would take alarm, draw in neck, tail and feet, and stop suddenly to recover courage and repeat the manœuvre a moment later — the riders varying the performance by standing upon the backs of their steeds and frisking about like circus riders.

"I was recalled from this diversion by the captain, and soon a fleet of twenty or thirty canoes was moving up the river. A mile above they turned up a branch, and the water shoaling the canoes were hauled upon the bank at a point of land, and a detour made through the forest until finally one of the men beckoned me to look down through the trees. We were on an elevation of perhaps one hundred feet above the stream, and as I glanced down I saw that it was almost dry, the channel dividing, one branch flowing on one shore, and one on the other, the middle portion being entirely made up of sand banks and shallow stretches of water. These banks originally may have been white, but now they were fairly black with the great turtles which we were in search of. If I had been told beforehand that such a vast number would collect I could hardly have believed it, but here they were before my eyes, literally covering the flat; not singly, but in piles and heaps, as many as five and six in some cases.

"The men enjoined silence, and proceeded carefully to the water's edge, then dividing; one half, perhaps thirty men, taking a net and going above and around, while the others remained opposite the unsuspicious animals to wait until the other party had reached a spot directly in front of them, the method of procedure being for both parties to advance on the horde from opposite sides of the river carrying the nets, which were ordinary seines, and so prevent the turtles from reaching the water. At a signal both parties crept to the edge and gradually spread up and down stream with the nets, and when the latter were stretched to their entire length word was given and all the men dashed into the shallow water and ran toward the centre or each other. The moment the turtles heard the noise and saw the men, it seemed as though the entire bottom was moving away, as they scrambled in indescribable confusion toward both parties, instinctively knowing that water was in that direction, while many went up and down; but by far the greatest number ran directly into the two nets that were soon connected at the ends, completely surrounding the reptiles. The men shouted with excitement, dashing after those which crept under, or moving the net to avoid the turtles which piled themselves up against it. But escape was well nigh impossible; they were entrapped, and that, too, without injury, and after many frantic endeavors to reach the adjacent water they seemingly became reconciled to their fate. The men then entered the trap and seizing the turtles tied them up with great skill and rapidity, while others took them out, often two men being required to carry one in the direction of the canoes. Only those of a certain size were retained, all the small ones being released to grow larger and perhaps be caught another year."

SEARCH-QUESTIONS IN GREEK HISTORY.

By Oscar Fay Adams.

III.

EARLY HISTORY OF ATHENS.

41. What legendary hero is said to have united the twelve districts of Attica into one state?

42. What early Athenian king is said to have sacrificed his life for his country, and in what way?

43. What title was substituted for that of king immediately after this event?

44. Into what three classes were the early Athenians divided?

45. Why was the establishment of the annual archonship an event of great importance?

46 What lawgiver punished with death all crimes from thieving to murder?

47. Why were the Alcmæonidæ expelled from Athens?

48. What Athenian lawgiver was counted one of the Seven Wise Men of Greece?

49. What punishment did his laws inflict upon those who took sides with neither party in any civil strife?

50. To what famous king did he say that no man should be called happy till his death?

51. What usurper showing to the people his self-inflicted wounds declared they had been received in defending the rights of the Athenians?

52. Which of his sons invited such poets as Anacreon and Simonides to court?

53. What two conspirators were counted as the first of Athenian political martyrs?

54. Name the first important reform instituted by Clisthenes.

55. How did his reforms affect the Senate?

56. How were public crimes tried at this time?

57. What peculiar system of punishment was instituted at this time?

58. Narrate briefly the way in which judgment of banishment was passed.

59. On what condition did the Persians offer their alliance to the Athenians?

60. How did the Spartans propose for the third time to overthrow the Athenian democracy?

ANSWERS TO DECEMBER SEARCH-QUESTIONS.

1. Pelasgi.
2. Hellas.
3. Poseidon.
4. The coast. See Wm. Morris's *Life and Death of Jason.*
5. Dorian.
6. The Dorians.
7. Minos was an early king of Crete (now called Candia). A famous code of laws was ascribed to him and his epoch marks the real beginning of Greek history.
8. Thebes, founded by Cadmus 1493 B. C.
9. This council consisted of twelve wise men sent from various parts of Greece for the management of public affairs. Its primary duty was the care of the Delphian temples and oracles.
10. The Heraclidæ, or descendants of Hercules, who were driven from the Southern peninsula of Greece about 1200 B. C. reconquered it about 1109 B. C. and the term is used for the Dorian migration into the Peloponnesus.
11. With the fall of Troy, dated as the year 1.
12. Argos founded about 1856 B. C.
13. Laconia. Lycurgus was its greatest man.
14. Sparta.
15. Originally the inhabitants of Helos, a city captured by the Spartans who reduced its citizens to serfdom. The Helots were serfs of the community and never became the property of individuals.
16. Athens.
17. Three.
18. The Corinthians.
19. Mycenæ. See Schliemann's *Mycenæ.*
20. Megara.



A YOUNG PRINCE OF COMMERCE.

By Selden R. Hopkins.

CHAPTER IV.

A TEST.

A YEAR has passed since Albert and Mr. Harwood were interrupted in their talk on credit by the telegraph-boy. The message was from a firm of commission merchants in New York, Messrs. Sherwin & Co., and it related to a large consignment of goods from a factory in which Mr. Harwood had a controlling interest.

During the intervening time young Vangrift has applied himself both in school and office, and has been rewarded by a promotion to an important post in the merchant's service. Again in the office, almost at the same hour, they are discussing business methods, and Mr. Harwood is speaking of a movement on foot to establish a bank in Williston. At present the nearest banking house is ten miles distant, at Chestwick. And again they are interrupted by a telegraph-messenger who hands Mr. Harwood a despatch which he read as follows:

> Cannot meet your draft owing to financial embarrassment. Can you come and see us?
>
> Sherwin & Co.

He passed the message to Albert, who said, as he glanced it over, "I rather expected something of that kind when they got the postponement a month ago. What do you propose to do about it?"

"I hardly know. What do you think we had better do, Albert?"

"I think it must be looked after at once and I should say you had better go and see them, as they request. Twenty thousand dollars don't grow on every bush," added he quite energetically.

"Well, then," repiled the old gentleman, "you may get ready, Albert, and take the night express from Chestwick. I believe I will leave the whole thing in your hands."

"But," began Albert in some astonishment at his twenty-thousand-dollar responsibility.

"No time for discussing. I'll risk you with the affair," said Mr. Harwood. "Go and get ready. You've only two hours and a half to eat your supper and get to Chestwick, and the roads are bad."

At nine o'clock the next morning young Vangrift walked into the office of Sherwin & Co., commission merchants in New York. The bookkeeper was at the desk, but neither of the firm had yet arrived. It seemed strange to the young countryman that business men should not be at their store before this time in the day. He learned that nine o'clock was an early hour for most city merchants to be found in their places of business.

When Mr. Sherwin came in young Vangrift presented his letter of introduction from Mr. Harwood, and though with many a shrewd glance at so young a representative of his most important creditor, Mr. Sherwin gave him a full account of how it had happened that the firm was experiencing financial difficulty. They had been convinced, he said, for some days, that it would be necessary to make an assignment.

[A person owing debts which he cannot pay may make an assignment of his goods or other property, that is, pass them over to another person to be held in trust, so that whatever property the person (bankrupt or assignor as he is called) owns will be converted into cash and divided *pro rata*, according to his indebtedness,

among his several creditors. This releases him from any further legal obligation. The principle is an old one at common law, though the different States have statutory enactments regulating such proceedings. The General Government had a Bankrupt Act which was in force from 1867 to 1876 which substantially put aside all State laws on the subject, but when the Act was repealed then the States legislation came into force again. Efforts are being made for another general Bankrupt law.]

"And what is it your purpose to do now, Mr. Sherwin?" asked his young listener.

"I hardly know, at this moment. We were hopeful that Mr. Harwood himself would come," he added frankly, "and we had expected to make him a proposition by which, if accepted, we would get the necessary assistance and continue our business. We need about twenty thousand dollars now and I believe Mr. Harwood could and would have helped us through."

"How much, Mr. Sherwin, do you owe?" asked Albert, without remarking upon this.

"About a hundred thousand dollars."

"Will you tell me briefly what you have got, provided you are given time, to meet your obligations with?"

"We have a large shipment of grain *en route* for Europe, against which we have drawn only a part of its value. There is owing us about eighty thousand dollars, and besides that we are expecting within ten days a bill of exchange from Liverpool for nearly twenty thousand dollars. If we had time to turn ourselves I'm sure, and I think Mr. Harwood would see it so too, that we would come out all right."

"I think I understand something about how things are," replied Albert. "Now, you will give me your proposition and before three o'clock today I will let you know whether I can do anything to assist you."

"We will propose then," said Mr. Sherwin, speaking as succinctly as had Albert, "that if you, as Mr. Harwood's representative, will loan us twenty thousand dollars we will place our notes and accounts in your hands and transfer warehouse receipts to the amount of forty thousand dollars, which will pay the loan and the twenty thousand we owe Mr. Harwood."

"That would not be precisely what I would want," replied Albert; "but if I may have the privilege of examining your books I can soon tell you how I would like to modify your offer."

"You have our consent to do so certainly, and we will place all the information you desire at your hands."

"I will return within an hour," said the young man as he took his hat and walked out of the office.

He at once sought the advice of a lawyer, an acquaintance of his employer, with whom he talked the business over, and then finding an experienced accountant to accompany him returned to the office of Messrs. Sherwin & Co.

The accountant was set to work and in a few hours, with the assistance of Messrs. Sherwin & Co.'s bookkeeper, had completed a superficial examination of the books. A summary of what the books showed was made up and put into the hands of young Vangrift. A private conference between the young man, the lawyer, and the accountant then took place. As a result a proposition was drawn up in substance as follows:

"As the representative of Mr. Henry Harwood, I propose, for him, to loan the firm of Messrs. Sherwin & Co. the sum of twenty thousand dollars upon the following conditions: I am to remain in their office as general cashier for the term of sixty days if I so desire, and am to have full and exclusive power of attorney to handle all moneys during the said term, and am to be consulted upon all important contracts. I am to be permitted to withdraw from the money of the firm within the said sixty days the sum of forty thousand dollars, the same being in payment of the said loan of twenty thousand dollars and an additional twenty thousand dollars now due and owing to Mr. Henry Harwood. I am also to have the additional sum of five hundred dollars for services, and interest."

The proposition was accepted. A formal contract was drawn up by the lawyer and signed by the parties. For the twenty thousand dollars young Vangrift filled up the blank draft given him by Mr. Harwood. The draft was deposited in the bank to the credit of the firm, and with it a power-of-attorney giving young Vangrift the exclusive right to draw checks as provided in the contract.

[A draft, as it is termed in business parlance, is

in law known as a bill of exchange. No particular form for it is necessary.

The following is the usual form :

Williston, Oct. 27 —

At sight (or at such and such days after sight) for value received pay to the order of Albert Vangrift twenty thousand dollars and charge the same to account of

Henry Harwood.

To Winslow, Brown & Co.
New York.

A mere order to pay money, written in the simplest form possible, is equally as good in law. Thus: the following form has been held to be a valid and binding bill of exchange.

Messrs. Winslow, Brown & Co. — Pay Albert Vangrift twenty thousand dollars.

Henry Harwood.

Before a draft is negotiable it must be accepted. Until it has been accepted it is a mere order or request, but does not bind the person upon whom it is drawn. There are three parties to this form of a bill of exchange. They are the *drawer*, the *drawee*, and the *payee*.]

In the draft used by young Vangrift Mr. Harwood was the drawer, Messrs. Winslow, Brown & Co. the drawees, and young Vangrift the payee. The draft having been presented to Messrs. Winslow, Brown & Co. and by them "accepted," it became negotiable like a promissory note. But before depositing it in the bank it was necessary for the payee to "endorse" it.

[By *accepting* a bill of exchange is meant writing across its face the name of the drawee and the date of acceptance. It has been customary to write the word "accepted" over the signature but this has been held in law as not necessary. If the drawee wishes, in accepting a bill, he may specify a place where he will pay it, and when this is done the bill must be presented for payment at the place specified. In having a bill of exchange accepted it is well to notice carefully and see that the acceptance corresponds to the manner in which the drawee is addressed. In an instance where it did not so correspond the payee was unable to collect and thus lost a large sum of money. The bill was drawn upon E. C. H. but when he accepted it he wrote across the face "Accepted Clayville Mills, E. C. H. Treasurer." He was treasurer of the Clayville Mills and the debt for which the draft was drawn was for those mills, but the draft was drawn not on E. C. H. Treasurer, nor upon the Clayville Mills. The court held that it was not an acceptance by E. C. H. and in the absence of protest and notice as the law required the drawer was discharged. The bill of exchange brought by young Vangrift is considered in law a *foreign* bill. It was drawn in one State upon a person or firm residing in another. A bill of exchange drawn upon a person living in the same State with the drawee is called an *inland* or *domestic bill*. A bill drawn against one living in a foreign country is called a *foreign bill* the same as one drawn against a person residing in another State. In accepting a bill of exchange it is advisable to write upon the face, in addition to the signature, the amount for which it is accepted thus :

"Accepted Oct. 28 – 18 – for twenty thousand dollars. Winslow, Brown & Co."

By *endorsing* a bill of exchange is meant writing simply the signature of the payee across the back. Bills of exchange frequently have a number of endorsements, as each person through whose hands they may pass usually endorses them. An ordinary bank check is considered in law as a bill of exchange. But, with this, it is not customary to present it to the drawee, that is, the bank, for acceptance. It is presumed that a bank check will be paid upon being presented to the drawee rather than accepted. Accepting a check by a bank is called "certifying." That is, the bank certifies that the check is good for the amount specified, and that the maker has funds on deposit to meet it. It is the duty of the bank as soon as a check has been presented for certification to charge it up to the depositor's account.]

The bill of exchange used by young Vangrift before it was deposited to the credit of Messrs. Sherwin & Co. had to be endorsed by them after being endorsed by young Vangrift.

In the office of Messrs. Sherwin & Co. young Vangrift had most excellent opportunity for acquiring a thorough insight into business affairs and especially this branch of business.

Commission merchants are persons intrusted with merchandise or other property to sell for

their principals, persons who ship to or place the merchandise in their hands. The compensation they receive is called a "commission." In law commission merchants are termed "factors" and their acts are treated under that division of law called Agency. Where these merchants reside in the same country with their principals they are termed *home*, or *domestic factors;* when in another country *foreign factors*. They may also be agents to *buy* goods for their principals.*

In the large cities commission merchants are very numerous and are engaged in a large variety of trades. There are those who handle only grain; others flour, meal, etc.; others, butter and cheese; and, others vegetables only. Some deal only in fruits, and others only in provisions. Then there are commission merchants for the sale of dry goods, others for boots and shoes, and others still who deal only in cotton, and others again only in paper. There are many other classes of goods sold largely by factors, but those named are the most common. Many commission merchants also buy and sell on their own account the same as other merchants.

When a person sends goods to a commission merchant to be sold for the account and risk of the owner it is called a *shipment*. The shipper or owner is called the *consignor*. The commission merchant is called the *consignee*. The goods while in the possession of the commission merchant are called *consignments*. Thus if Mr. Harwood ships merchandise to Messrs. Sherwin & Co. he, Mr. Harwood, terms it a "shipment," but Messrs. Sherwin & Co. term it a "consignment." The goods may be reshipped by Messrs. Sherwin & Co. to another factor, in some other city. They then become a "shipment" with Messrs. Sherwin & Co. and a "consignment" with the factor to whom they are shipped.

The laws of the various States which govern the acts and prescribe the duties of commission merchants or factors form an interesting subject for study by those wishing to acquire a knowledge of business. The law provides that factors are bound to follow the instructions of their principal, and are responsible to him for neglect or violation. Where a factor, in the hope of obtaining a better price, held the goods a few days beyond the time when he was directed to sell them, and the price went down instead of up, as he expected, the law said he must pay damages to the owner for the loss. In another case (though fortunately, it was not the same factor) a commission merchant who had goods shipped to him, with instructions to hold them until further directions, sold them because he thought they would bring a better price, and did not wait for the further directions. The shipper sued and the factor was made to pay damages. But when there are no particular instructions a factor must exercise his judgment. He may, when the state of the market renders it for the advantage of the principal, send the goods to a neighboring market for sale there. The factor is protected against liability for loss when he acts in good faith, and according to his best judgment, but not contrary to positive directions.

These are a few of the many things it became necessary for young Vangrift to learn while with Messrs. Sherwin & Co. as the representative of his employer.

He was attentive to his duties and gave all the details of the business which came under his notice careful study. As the creditors came in they were paid their money, and a strong exertion was made to collect in all that was owing the firm. The prices of grain and produce were "firm" and trade was "brisk" so that even before the sixty days provided for in the contract had expired young Vangrift had drawn out of the business the forty thousand dollars and deposited it to the credit of Mr. Harwood. He then made a settlement, received his five hundred dollars for services, and took the train for Chestwick, having written his employer in advance the day he should be there.

* See Storey on Agency §110.

(TO BE CONTINUED.)

SOME SUCCESSFUL WOMEN.

By Sarah K. Bolton.

IV.

MRS. G. R. ALDEN ("PANSY").

I AM going to write a sketch of 'Pansy,'" I said to one of the young ladies in our Public Library, "and I would like to take several of her books home, to look them over."

"There are none in," she replied.

"None in, when I see by your catalogues you have several of each of her more than fifty volumes?"

"Oh! there *is* one in — *Mrs. Harry Harper's Awakening*, but that will probably be taken out during the day."

"What is the reason 'Pansy's' books are always in demand?"

"Because they are bright reading for young people, and as pure as they are bright, and we like to specially recommend them. When hundreds come to us, and ask what they shall read, among those of the few unexceptionable writers we can always speak well of the 'Pansy books,' and the boys and girls always come back pleased, and ask for others by that author."

What is true of "the Pansy books," in the Public Library of Cleveland, I doubt not to be true of them in the libraries of other cities.

I have just been reading Mrs. Alden's *One Commonplace Day*. I have been with poor Kate Hartzell to the picnic, and felt ashamed of Fannie Copeland, or any other girl who is too proud to associate with a noble-hearted young woman because she helps to wash dishes and make bread. I have felt a great liking for Mildred Powers, who, though her father was a judge at Washington, put on no airs, and was thoroughly kind to everybody. I have followed Kate to the home of the drunken father and drunken college-brother, and have seen how a girl really can be a ministering angel. I understand, I think, the reasons for the perennial popularity of the "Pansy books." They waken the music of the noble chords of the soul. In their influence, as compared with that of the usual Sunday-school book, or work of light fiction, lies the difference that exists between waltz and oratorio.

It was years ago that I read *Ester Ried*, and cried over Ester's death, as I suppose thousands of others have done. After that I was always wondering how the author of that most magical book talked and looked and if I should like her if I ever saw her.

One day I heard that "Pansy" was to conduct



MRS. G. R. ALDEN ("PANSY").

the primary department of the Sunday-school Assembly at Framingham, Mass. So I went out from Boston to hear her.

When I arrived, I found a crowded house listening to a sweet-faced woman, in early life, much younger than I had supposed, with a rich, pleasant voice, heard in every part of the house, and with a most attractive and womanly manner. She was natural, interesting and earnest. It is unnecessary to add that I liked her.

And now what has been the history of this very successful woman?

Born in Rochester, N. Y., in 1842, she had two blessings, perhaps the greatest earthly gifts: a father and mother who were wise, patient, tender, helpful under all circumstances. The father held wonderfully pronounced convictions on all the great questions of the day; he was a strong temperance man, a strong anti-slavery man, a leader in every moral reform, and pressing forward alone oftentimes, for public opinion was not educated up to his standard, whereas now he would have hosts of co-laborers. The noble man standing solitary upon advanced positions, upon high lonely look-outs, lived half a century ahead of his time. The mother was a sunny-hearted, self-forgetful woman, devoted to all that was pure and "of good report."

Their little girl, Isabella, received her now famous name of "Pansy," from an incident in her baby-life. The mother had a choice bed of great purple and yellow pansy blossoms, which she was treasuring for a special occasion. One morning the wee child, being in a helpful, loving mood, sallied out, and picked them every one, and bringing the treasures in her arms showered them in her mother's lap, with the generous statement that they were "every one for her."

They were to have been used on the evening following, and the good mother was much disturbed; but the father mounted his baby in triumph on his shoulders, and called her his own little pansy-blossom; and from that time the sweet name clung to her. Thus gentle was the man of strong thought, over a thing that could not be helped, and which was done in innocency. A less thoughtful parent might have punished the child, and then wondered as she grew older that she did not develop lovelier traits! How often we spoil the flowers in our home gardens!

A little incident which I have heard Mrs. Alden relate, shows not only the love within that early home, but the skill of the father in the character-forming of his child. "I recall," said she, "a certain rainy day, when I hovered aimlessly from sitting-room to kitchen, alternately watching my father at his writing, and my mother at her cake-making. She was baking, I remember, a certain sort known among us as 'patty-cakes,' with scalloped edges, and raisins peeping out all over their puffy sides. I put in an earnest plea for one of the 'patties' as it came from the oven, and was refused. Disconsolately I wandered back to father's side. He was busy with his annual accounts. Our home was in a manufacturing town, where the system of exchange, known as 'due-bills,' was in vogue. Something caught my eye which suggested the term to me, and I asked an explanation.

"Father gave it briefly. Then I wanted to know whether people always earned the amount mentioned in the due-bill, and my father replied that of course one had the right to issue a due-bill to a man who had earned nothing, if for any reason he desired to favor him, and that then the sum would become that man's due, because of the name signed.

"I remember the doleful tone in which I said, 'I wish I had a due-bill.' My father laughed, tore a bit of paper from his note-book, and printed on it in letters which his six-year-old daughter could read, the words:

DEAR MOTHER:
PLEASE GIVE OUR LITTLE GIRL A PATTY-CAKE FOR MY SAKE. FATHER.

"I carried my due-bill in some doubt to my mother, for she was not given to changing her mind, but I can seem to see the smile on her face as she read the note, and feel again the pressure of the plump warm cake which was promptly placed in my hand.

"The incident took on special significance from the fact that I gave it another application, as children are so apt to do. As I knelt that evening, repeating my usual prayer: '*Now I lay me down to sleep*,' and closed it with the familiar words: '*And this I ask for Jesus' sake*,' there flashed over my mind the conviction that this petition was like the 'due-bill' which my father had made me — to be claimed because of the mighty name signed. I do not know that any teaching of my life gave me a stronger sense of assurance in prayer than this apparently trivial incident."

"Pansy" began to write little papers very early in life, which she called "compositions," and which were intended for her parents only. From her babyhood she kept a journal where the various events of the day were detailed for the benefit of these same watchful parents. There could have

been little that was exciting or novel in this girlish life, but the child was thus trained to express her thoughts, and to be observing — two good aids in her after-life. She was also encouraged to send long printed letters each week to her absent sister, telling her of the home-life, and describing persons and places. "Pansy" was very happy in all this work, stimulated by gentle appreciation and criticism.

When "Pansy" was perhaps ten years old, one morning the old clock, which she "really and truly" supposed regulated the sun, suddenly stopped. Such an event had never before occurred. She considered it worthy of a special chronicle, and forthwith wrote the story of its hitherto useful life, and the disasters which might have resulted from its failure in duty. This clock was very dear to the father and mother, being associated with the beginning of their early married life. When "Pansy's" story was read, she was startled, almost frightened, over this discovery — that it drew tears to her father's eyes. He said he would like to have the story in print, the better to preserve it, and that she might sign to it the name of "Pansy," both because that was his pet name for her, and because the language of the flower was "tender and pleasant thoughts," and these she had given him by her story.

How pleased the little girl was that she had made him happy, and that when a real story of hers was in black-and-white where the world could read it, none would know the real author except the family. How her heart beat when the little ten-year-old author looked upon her first printed article, all those know who have ever written for the press.

Her first book, *Helen Lester*, was not published until ten years later. She wrote it in competition for a prize, and was so fortunate as to gain it. This greatly encouraged her, though her best encouragement was, as she says, "the satisfaction which the little printed volume bearing the pet-name, 'Pansy,' gave to my father and mother."

Following upon that first little book, "Pansy's" literary work has been constant and most successful. She has written between fifty and sixty volumes, of which over one hundred thousand copies are sold annually. They are in every Sunday-school, and in well nigh every home. It is believed that *Ester Ried* has had the largest sale, and has exerted the most beneficent influence of all her works. Of this book, Mrs. Alden says: "The closing chapters were written while I was watching the going out of my blessed father's life. To the last he maintained his deep interest in it, and expressed his strong conviction that it would do good work. It went out hallowed with his prayers, and is still bearing fruit which will add to his joy, I believe, in heaven. The last chapter was written in the summer of 1870 with the tears dropping on my father's new-made grave."

The titles of Mrs. Alden's books are familiar in all households: *Four Girls at Chautauqua*, with its charming sequel, *Chautauqua Girls at Home*, *Tip Lewis and his Lamp*, *Three People*, *Links in Rebecca's Life*, *Julia Ried*, *Ruth Erskine's Crosses*, *The King's Daughter*, *The Browning Boys*, *From Different Standpoints*, *Mrs. Harry Harper's Awakening*, *The Pocket-Measure*, *Spun From Fact*, *etc.* — titles familiar in all Public Libraries, and to Sunday-school librarians in all denominations. Though she is an adept in the arts and peculiar fascinations of the novelist, a master-analyst of the subtler workings of the human heart, she has from the outset dedicated her work to the advancement of the Christian religion in the home-life and in the business-life; to making alive and important and binding and "altogether lovely," the laws of the Bible. The glittering prospects of other fields in literature have not allured her aside.

But Mrs. Alden's books are only a portion of her life-work. Her husband, Rev. G. R. Alden, is the pastor of a large church, and she works faithfully at his side, having a high ideal of the duties and peculiar opportunities of a minister's wife. She is president of the missionary societies, organizer and manager of a young people's branch, superintendent of the primary department of the Sunday-school, and the private counsellor of hundreds of young people. While she enjoys her literary work, she makes it subservient to her church and Sunday-school work.

She says, "My rule has been to write when I can get a chance, subject to the interruptions which come to a mother, a housekeeper, and a pastor's wife."

Yet for seventeen years Mrs. Alden has been under contract (never broken) to keep a serial story running in the *Herald and Presbyter*, through the winter; and for ten years she has given her

summers largely to normal-class work at all the principal Sunday-school assemblies, having been several times at Chautauqua, Framingham and Florida, and is under engagement to do the same work in Kansas, Nebraska, Wisconsin and Tennessee.

One would suppose that with all this work, Pansy's hands would be full to overflowing. But she finds time to do more than this. For twelve years she has prepared the Sunday-school lessons for the primary department of the *Westminster Teacher*, the organ of the Presbyterian Board, and has been for two or more years the editor of their *Primary Quarterly*.

And there is more to tell. For eleven years she has edited the *Pansy*, the well-known Sunday magazine for boys and girls, and there is always in this a serial story from her pen and a continued Golden-Text story, besides innumerable short stories, which now, collected, make a complete Primary Sunday-School Library of about forty volumes.

One of the most interesting things in connection with this magazine, is the "Pansy Society," composed of those children who are subscribers, and who are pledged to try to overcome some besetting fault, and who take a whisper-motto: "I will do it for Jesus' sake." All who join, have a badge, a beautiful pansy painted on white satin, and fastened at the top by a silver pin.

The members of this society from Maine to Louisiana, write to "Pansy," and mother-fashion, she answers them, a hundred or more a week. Already there are thousands of members, who are trying to stop fretting, to obey parents, to be patient, to say only kind words of others, to overcome carelessness, and to make somebody happy. The amount of good done by this beautiful, simple means to form correct habits in early life, is simply incalculable.

The letters from the little ones among the members are full of naive interest, many written with a hand just beginning to do its first work with the pen.

One older child writes:

> Mamma says I ought to tell you at the commencement that I am eleven years old, but a poor penman, and she is afraid you cannot read my letter, but I will try and do my best. I have taken *The Pansy* for two years and enjoy it very much. After reading it I send it in a mission barrel to the children in Utah. I had rather keep them, but mamma thinks I onght to let some one else enjoy them. I have read all your books except one or two of the last. From reading *Pocket Measure* I learned how nice it was to give. Mamma especially likes *Mrs. Solomon Smith Looking On*. I would like to become a member of the Pansy Society. I have tried for a week to find the fault that I want most to overcome, but I do not know which one it is, I have so many; it seems to me as if everyone else had but one fault. One is my not obeying quickly when mamma speaks. I had rather read your books and magazine than do what I ought. I do like to read very much. Another is my temper which is very quick; when anything is said which irritates me I speak quick even to my dear mamma. I pray over it and work hard to overcome it. . . I have a picture of you which papa is going to have framed and hung up in my chamber, so that I can look at it and think of you.

Letters come, too, from mothers and teachers, telling of the beautiful work of the Pansy Societies. One mother writes of her own home club formed of her six children. She says:

> We are trying to make its influence for good extend far and near. At Christmas we got together a large lot of old toys, picture-books, etc., with boxes of cake and bon-bons, and sent them to some poor children in our community who were not able to buy new ones. We also sent a box of Christmas goodies to each of the real old ladies and gentlemen living near us, who were likely to be overlooked in the overflow of young life surrounding them. Also sent out some suitable presents and eatables to needy colored families.
>
> For St. Valentine's Day some valentines were prepared and sent to such children as would be likely to be forgotten on this festive occasion. The *Pansy* has been a regular visitor here for the past four or five years, and we would feel very much as if one of the family were gone, if we were deprived of it.

Mrs. Alden is still in the fresh prime of her strength. She carries her work with quick step and sunny uplook. She is so wise and so friendly, so good an interpreter — let us be glad that the eloquent pen is a swift one and tireless.

WAYS TO DO THINGS.

By B. T. Newman.

LIII.

A HOME-MADE HOBBY-HORSE.



THE HOBBY-HORSE.

HIS illustration shows a useful home-made plaything, which is very easily constructed by an older brother, say; affording the little children hours of amusement, which ought to well repay the time used in making. The materials necessary are some smooth half-inch boards three feet long. If possible have them fourteen inches wide, so as to have but one joint.

Get a smooth piece of brown paper a yard long, and twenty-seven inches wide. Divide the surface of it into squares, measuring each one foot, using a straight edge and lead pencil. Sub-divide these squares each into four smaller ones measuring six inches — as shown by the dotted lines in (*fig* 1).

Commencing at the ears, the outline of the horse can easily be followed from one square into another until the design is completed. With a pair of scissors cut out along the outside line, including the rocker, as shown by the dark outline in (*fig* 1).

Place two boards together, the edges having first been planed to make a good joint.

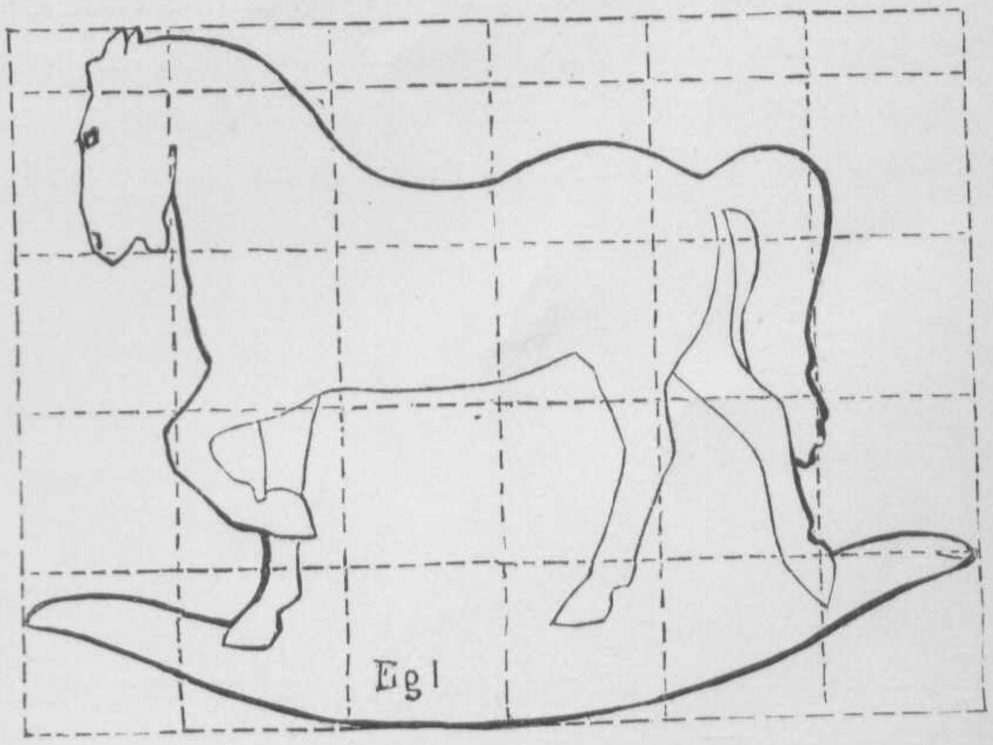
Mark out the horse and rocker, by laying on the paper pattern, and pinning it in place, following the outline with a soft lead pencil. The two boards must be separately sawed with a compass saw, with which it will be easy to follow the outline, as shown by the dark line in (*fig.* 1).

Upon two similar boards another horse is drawn and sawed out in the same manner.

Prepare some hot liquid glue and also four battens of half-inch pine — two of them one and one half inches wide and twenty-five inches long (*fig.* 2, *B*), and two others eighteen inches long and two and one half inches wide (*fig.* 2, *A*). The top of this latter is pointed, affording a rest for the back of the seat. Glue the parts of the horse together, and also cover the face of the battens with glue. One long and one short batten are then securely screwed to the side of each horse-shape, with three quarters or seven-eighth inch screws, placed six inches apart. The forward edge of *A* is twelve inches from the rear end of the rocker.

The horses are to be separated eighteen inches, and a seat with back and foot-rest secured between them. *Fig.* 2 shows how they are to be placed.

The pieces *CD* and *EF* must be made of boards three fourths or seven eighths of an inch thick, nine inches wide, and eighteen inches long. Be careful and saw the ends of each square, and have them exactly of equal length. The seat is seven inches wide, and eighteen inches long, and may be of half-inch pine, as well as the back, which is the same length, and eight inches wide. The foot-rest



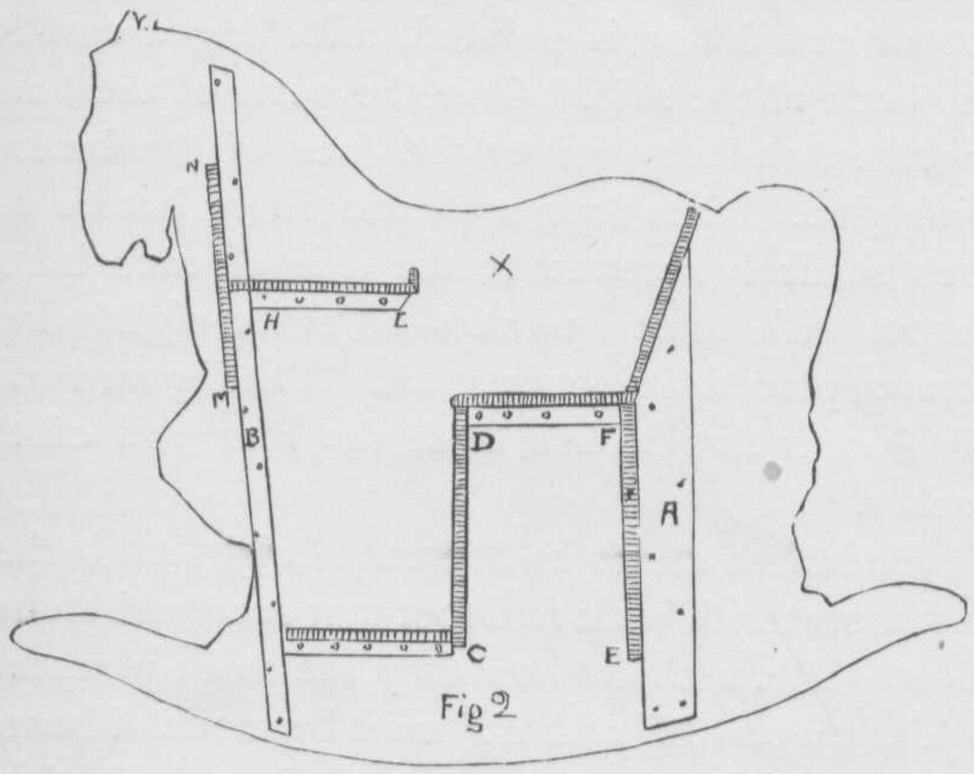
METHOD OF DRAWING.

is six inches wide. This may also be made of the same material.

Take one of the thick pieces, and place it in position against the battens *A* of each horse, and

secure it by driving two-inch nails through the horses from the outside. Secure the second thick piece, *DC*, in the same manner, allowing six inches space between the two. The tops must be on a level with each other. Between the upper edges of each on both horses a batten six inches long and one and one half inches thick must be screwed, to afford a rest for the ends of the seat.

Having rounded the forward edge of the seat,



METHOD OF CONSTRUCTION.

nail it in position with one and one-quarter inch finish nails. Next nail on the back with similar nails, driving them into the top of the batten *A*.

A short strip, similar to the one across the end of the seat, is screwed to the inside of each horse, at the bottom edge of *CD*, on which to nail the foot board. After this has been secured in position, put on another short batten *HL*, for a rest for tray, made of half-inch pine seven inches wide.

Another board, *MN*, nine inches wide, should be nailed across, between the horses, and secured to the strip *B*, with one and one-quarter inch finish nails. It is also nailed to the edge of the lap board at points not less than three inches apart. A raised edge may be a useful addition to suggest for the border of the tray to keep any small playthings from rolling off to the floor.

Take the brown paper pattern upon which the design is drawn and finish the legs of the horse, then cut out the animal entire.

Pin it upon the outside of one horse and repeat the outline upon the wood by marking round it with a soft lead pencil.

Draw the outline upon the outside of the other horse in the same manner. Smooth with sand paper and paint the horses any desired color. The rockers and space between the legs must be of some different color. A granite gray is a good tone. Mix with your paint a small quantity of Japan varnish to give the surface a smooth bright finish. When dry use a round pointed brush with black paint and draw the outline of the legs, tail, neck, ears, mane, etc., following the design in initial picture. The inside of the horses, seat, lap board, etc., may be painted any pretty color. Tack on strips of red leather for bridles.

The seat and back may be upholstered, if desired. A strap to fasten a young child upon the seat may be found very useful. A skate strap twenty-two inches in length may be cut in the middle. Fasten one end of each part to the sides at the point *X* (*fig.* 2). The ends can be buckled and safety for the little one be ensured.

WINTER DREAMS.

By George Cooper.

RED leaves and purple leaves covered the seeds—
Some were of flowers, and some were of weeds;
Soon they were dreaming, safe under the ground,
Soon the snow's coverlet wrapped them around.

Daisy-seed dreamt that a tea-rose was she;
Thistle-seed fancied himself a great tree;
Buttercup smiled, for a flaring sun-flower
In a fair garden, she saw herself tower.

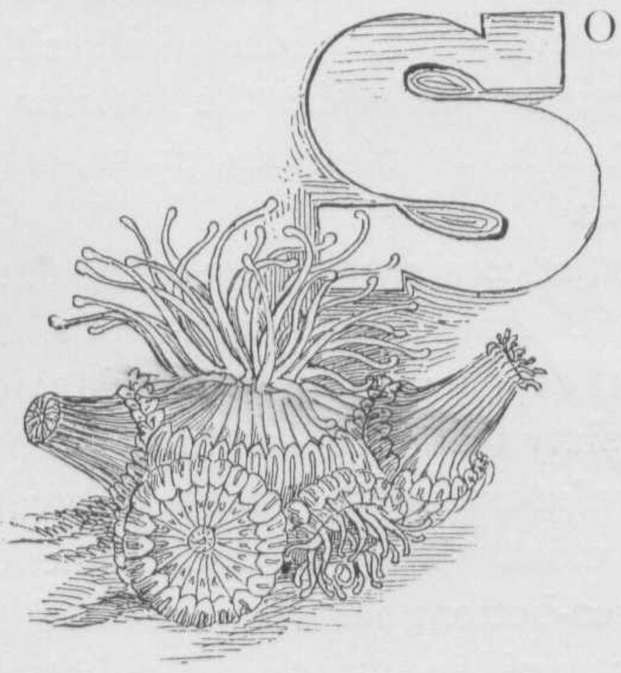
Grass-seed imagined itself a broad rush;
Burdock a briery blackberry bush,
Pansies and peonies saw themselves lilies,
And plain ragged-sailors were daffydown-dillies.

WONDER-WINGS, MULLINGONGS, COLOSSI, AND OTHERS.

By C. F. Holder.

IV.

IN THE CORAL COUNTRY.



SOME NEW ENGLAND CORALS

SOME years ago a friend who was interested in natural history, accepted an invitation to lecture in one of the large Eastern cities. The subject was the corals; and he suggested that as there was a very general misunderstanding as to the nature of these interesting animals he would give particular attention to that part of the subject. The announcement, "A Lecture on Corals," by Professor ——, was given to the secretary of the society for publication, and before handing it to the printer he corrected what he considered a slight mistake, so the announcement read that Professor —— would lecture upon the "coral insect" — much to the Professor's indignation, as it was the idea of "the coral insect" that he wished to correct.

The "coral insect" is a growth of several poetic imaginations, and the descriptions of its toiling and building are equally freaks of fancy; so before discussing these animals and their homes let us obtain an idea of the true nature of corals.

While the white, bleached, dead coral is by no means rare, you may not have seen a live coral; though a very beautiful one, *astrangia*, is found in Long Island Sound and in adjacent localities.

But while not familiar with living corals we may find all along the New England coast a cousin of theirs — the sea-anemone, which will afford us an idea of the coral animal. In any pool at Nahant, or wherever there are rocky shores, we shall find pillar-shaped objects of brown or other hues, varying from two to four inches in height, and in some cases resembling a beautiful flower; the upper portion spreading out and seemingly divided into myriads of petals often colored with rare and beautiful tints. If we touch this seeming flower it shrivels; the petals draw in, and the living pillar or column seems a brown inconspicuous mound.

This animal is an anemone, or *actinia*, and one of myriads found in nearly all waters, sometimes simple in color, sometimes gorgeous, sometimes scarcely an inch in length, sometimes a giant two feet across.

If now we try to take up this anemone we shall find it a difficult operation; in fact, it adheres to the rock tenaciously. Upon examination we learn that the anemone has a sucking-disk by which it anchors itself. By prying off a specimen and placing in a glass jar, we can see it adhere yet gradually move along; so the sucking-disk not only is an anchor but is also a locomotive organ.

Examining the other portions, we find the anemone in its structure to be a simple sac with a sucking-disk at its lower end; the edge of the upper end divided off into lobes called tentacles which may be long or short, and are hollow, and connect with an opening in the interior of the bag formed by the outer wall and the wall of the stomach which hangs in the animal; there is no mouth or throat, a simple opening in the centre of the tentacles performing this office.

We see that the anemone is one of the simplest animals to be imagined. The food is caught by the tentacles (which are provided with innumerable stings or lassos, which benumb small animals) and drawn by them down into the simple stomach where digestion by the aid of sea-water is carried on.

Now if we should make a section of one of these anemones, we should find that the body is divided up by six partitions reaching from the outer wall and seeming to support the stomach or mouth-cavity. In the centre of each of these rooms is another partition, which, however, does not extend

to the centre, and there are many other small ones. The large partitions are perforated, so that the food taken in at the mouth circulates from one room to another, somewhat as blood circulates in the human body.

So we see that the anemone is a simple sac divided up into partitions; and I am sure that none of my readers will for a moment confuse it with a beetle, or a butterfly.

Now try to imagine that this Nahant anemone has the faculty of taking lime from the water that passes through the rooms just described, and of depositing it in and about itself heaping it up gradually, and we shall have grasped the whole coral idea; for this absorption or reception of lime, and its subsequent secretion, constitutes the only great difference between the corals and the anemones. One is a polyp which cannot secrete lime, and the other is a polyp that does. There are other differences, but this study of a polyp is sufficient to show that corals cannot be classed as insects; but as polyps which secrete lime, not building it up, but secreting it just as we secrete our bone material.

To more forcibly illustrate this: if we take a piece of dead star-coral, or *astrea*, we shall find it made up of many little cells of lime each with a hollow in the centre for the mouth, and with radiating partitions all around which have been secreted in the little apartments.

The corals or lime-secreting polyps are of many kinds. Some are single and are a foot or more in length, as the *fungia;* others by building and branching form communities, as the branch-corals; others again assume the form of enormous heads eight or ten feet across, while many more imitate leaves and assume various beautiful shapes, and in the aggregate constitute reefs, shoals, and islands which are important factors in strengthening the world. So that insignificant as it appears, the simple coral animal wields a mighty power, and has ever been an important agent in building up continents.

The branch-corals, which flourish in all seas where coral is found, constitute but a small proportion of the group. Next in importance came the coral-heads (*astreas*, etc.). These grow on the reefs in the Gulf of Mexico on the edges of the channels, and attain enormous size. Some that I have seen at Garden Key were six feet across, and from three to four feet high. When approaching them they seem to be ornamented with flowers blooming all over their surfaces. These seeming flowers are boring-worms which have penetrated the coral; their breathing organs resembling the petals of brilliant blossoms. At the slightest disturbance they disappear, leaving the orifice of a tunnel visible.

The great coral-heads are sometimes exposed at extreme low tides, the polyps upon the surface then dying; and finally the dead matter washing or wearing away, a huge vase is formed, its sides covered with living polyps, while the interior is a great hollow — the home of fishes, crabs, cray-fish and sea-urchins.

It is known that the corals which are recognized as reef-builders, the branch and head-corals, do not flourish at great depths; in the Gulf of Mexico at about forty or sixty feet. In localities farther south this limit may be extended; but reefs in very deep water do not exist. They do not commence to grow until the sea-bottom has been elevated to within sixty feet or so of the surface. The bottom of the ocean in its contour differs in no respect from the land; there are the same hills, valleys, mountains, plains and plateaux. Wherever in the coral-reef belt (which may be considered to lie between 35° north and south) the top of a sub-marine mountain approaches within sixty or one hundred feet, more or less, of the surface, there we find coral-reef in some stage; and according to their form or method of approaching the surface they are given different names, as barrier-reefs, atolls, fringing-reefs, etc.

But it is evident that the bottom must have been elevated to reach this zone where reef-making corals commence their growth, and the methods by which this elevation is accomplished are among the most interesting features of the subject.

If we take a handful of material brought up by the dredge from the Gulf Stream between Loggerhead Key and Havana, we shall discover the secret. Separating the material we find a strange assortment. A large proportion is fine mud which we put aside for microscopic examination; but here is a mass of tubes formed by a worm; there the ground shells of sea-urchins, the hard portions of crabs and shells of various kinds, all mixed in a conglomerate with the remains of innumerable other animals. So we see that the

inhabitants of this submarine world do important work in building the plateau upward toward the surface.

Now let us examine under the microscope the soft mud or sand which largely constitutes the bottom. A revelation! Instead of ground shell we see it is made up of numberless minute shells, many of them entire, and some of beautiful design. They are not mollusks, however, but the shells of some of the lowest of animals and plants, known as *foraminifera* and *diatoms*. In some parts of the ocean these shells are of great depth, and form a thick sediment on the bottom, called the globigerina ooze.

But where do all these shells come from? From the open water above. We find every drop alive with wondrous forms, so many that it has been estimated that if they are as numerous at a depth of six hundred feet as they are near the surface, there must be sixteen tons of them in the upper one hundred fathoms of every square mile of the ocean. How many billions of shells are required to weigh sixteen tons, when each shell is almost invisible, would be difficult to even imagine, but in this unaccountable number of shells we see an important factor in the preparation of a platform for reef-building. Enormous quantities of these minute organisms are constantly dying, their shells sinking; so that in the ocean — if we can but imagine it as it would appear through a huge magnifying-glass — there is a constant shower of shells falling upon the bottom. Many are dissolved, but vast numbers, as we see by the globigerina ooze, reach the bottom whole, piling one upon another, the increasing weight crushing those beneath into a powder, ever accumulating and growing upward; so that we can see that in time the top of the submarine hill will surely be elevated until it projects into the zone of reef-making corals.

But before we follow the history of the reef let us contemplate again the rain of shells. In the deep ocean or in the valleys, there is little chance of their ever, without help, building up to the surface. This help comes in "elevations of the crust." If we go to the Straits of Dover we shall find in the Dover Cliffs the practical results of untold centuries of these shell-rains assisted by crust elevation. The Dover Cliffs are made of chalk, which is really lime, deposited upon the bottom of the ocean in just the way we have described. After ages of shell-deposits, an elevation of the crust occurred — that is, the bottom of the ocean was thrust by some convulsion high into the air, giving us the white Dover Cliffs of to-day.

The stones of which the great pyramids of Egypt are made are formed of a species of foraminifera;



CORAL VASES.

HERMIT-CRAB WITH CORAL-GROWTH.

the blocks are literally sections of an old ocean bed. How many shells there are in these great monuments it is impossible to conceive. The pyramid of Gizeh measures seven hundred and sixty-four square feet at the base, has a perpendicular height of four hundred and eighty feet, covering about four acres; and seventy-nine million twenty-eight thousand cubic feet of these fossil shells were consumed in its formation. An English architect has recently had the patience to figure the cost of erecting such a monument to-day, and his estimate

was one hundred and forty-five million dollars!

Along with the shells of foraminifera in the submarine depths we find vast numbers of forms equally beautiful, known as diatoms. These are assumed to be minute plants, and they also are important factors in building up ocean-bottoms. They not only rain upon the bottom of oceans, but the fossil forms are caught up at times from the elevated beds along-shore and whirled through the air in vast showers. When the late Professor Darwin was at St. Domingo he noticed one morning that the air was filled with a thick dust. Some of it was collected from the rigging of the vessel and sent to Professor Ehrenberg, who found that in it were represented the silicious shields of sixty-seven different organic forms; two being marine, the rest fresh-water organisms which were being borne out over the ocean to unite and join the submarine rain of shells. Some idea of the enormous numbers of these plant-forms can be gained when it is known that the dust-clouds or showers are sometimes so thick that on account of them vessels have run ashore just as they would in a fog. The dust-rain descends upon vessels a thousand miles out at sea; South American forms are carried to Africa by currents, and African species transported to South America.

One of these showers fell in Lyons, France, in 1846, and it was estimated by Professor Ehrenberg that over seven hundred thousand pounds of material fell, of which ninety thousand were the shells of microscopic organisms. One shower observed by Darwin at sea had an estimated breadth of sixteen hundred miles and an area of over a million square miles. Sir John Ross describes a bank, called Victoria Barrier, four hundred miles long and one hundred and twenty miles wide, composed almost entirely of these shells. The city of Richmond in our country is built on a stratum of them nearly twenty feet in thickness.

Having shown some of the remarkable agencies that are helping to build up platforms under the sea, let us return to the history of the coral-reef. Years go on and this accumulation reaches within sixty or seventy feet of the surface; then a new factor is noticed. Corals begin to grow, and soon the top of the ocean-mountain has a crown of beautiful forms — corals, fans, plumes. These grow rapidly, die down, adding to the mass until the surface is reached. The waves grind up the branches, wash them up in lines or circles, according to the shape of the platform, until finally the dead coral rock is dry even at high tide, and the coral key or island formed. Seeds, always drifting about on the ocean, are washed upon the bank, and soon palms or mangroves take root and grow. The birds discover it and make their nests there, and as the key becomes larger and more habitable man takes possession — probably without a thought of the little creatures whose lives have gone to build his home.

The rate at which coral grows has also been as much mistaken as the method of reef-formation. The general idea is that it is extremely slow. I have observed branch coral which grew four or five inches in a year, and in certain localities on the Florida reef it is even more rapid. A brick bearing a small head of *meandrina* was kept under observation a year, and the coral found to have grown an inch during that time. This was in an aquarium; the growth in open water with a more abundant food-supply would be more rapid. In the Keeling Atoll a channel was dug through to admit the passage of a small schooner. It was not used for ten years, and was then almost completely filled with growing coral. On the Madagascar reef masses of branch-coral were fastened by stakes three feet below the surface, and seven months after were found almost at the surface — an astonishing growth.

Corals often assume curious shapes. A specimen of Eastern coral was formed almost exactly like a base-ball bat, and six or seven feet in length. Leaf-coral often assumes the appearance of plants, and one branch that I saw resembled a huge pair of antlers. Some heads grow in a perfect oval, while others are flat. Often they seem to imitate groups of plants, and a piece that I brought up from about thirty feet in the Gulf of Mexico resembled a bouquet of flowers.

While individual heads and branches take strange forms, the configuration of reefs and keys is equally interesting. Long Key, of the Florida reef, for many years was nearly a mile long, and not over one hundred and fifty feet wide. This form was produced by the prevailing northeast winds throwing up the white sands of an extended lagoon. The key was pure white, and composed almost entirely of ground bleached coral, broken shells, and the leaves of a lime-secreting seaweed. At

every storm the key changed, and some years after my observations a friend who visited the spot told me that it had almost disappeared, and now I understand it is forming again.

This reef almost approaches the atoll form, which is found in all its perfection in the South Pacific where almost circular ridges of coral are seen with a central lagoon often affording a fine harbor, while the outlying ridge is covered with a luxuriant growth of trees, generally palms or mangroves. The atoll is formed by dead coral rock thrown up by the winds, the action of the waves grinding up great quantities into sediment, which washes into the interior, there sinking and forming a flat or lagoon upon which seaweeds and corals grow, while currents form deep channels, until we have a central lake surrounded by a fringing island often only a few feet in width. In some cases the lagoon finally becomes filled up or partly so; in others the dead calcareous matter, as the branches of coral, etc., are carried away in solution by the carbonic acid of sea-water, and thus the lagoon for years retains about the same depth. But each atoll is acted upon by different winds, currents, etc., and has a history more or less its own.

While the reef-making corals are confined to certain limits near the surface, this is by no means true of all corals; for instance the *fungia*, or mushroom coral, a single polyp, is found at great depths. Ten genera have been found living at a depth of one mile from the surface, four at nearly two miles, while the *Fungia symmetrica* has been discovered in localities ranging from one hundred and eighty feet to three and a half miles. In these greater depths the pressure is enormous, and the temperature presumably but little above freezing. So it will be seen that the popular belief that all corals require warm water is subject to some exceptions.

Coral is often found in curious places. A crab was once caught which had a small bunch covering its shell. When the Atlantic cable, or a portion of it, was taken up for repairs a coral was found growing upon it, and I have visited an old wreck where the interior was fast filling up with a rich growth of beautiful polyps.

The most valuable coral is the red variety, *A. alcyonarian,* found in the Mediterranean Sea, where the business of collecting it is of great importance, over eighty thousand pounds being taken every year. Algeria sends out about three hundred vessels, and over thirty thousand men are employed in the fisheries, the entire catch of coral being valued at considerably over a million dollars.

The coral is collected principally by nets formed of cross-pieces of wood to which are fastened tangles of rope. This contrivance is weighted and dragged along over the bottom; the branches becoming entangled and so brought to the surface. In some localities the men dive for the coral, but, as a rule, nets or drags are used.

When first collected the coral does not present an attractive appearance, and it is only when the outer portion which contains the cells is removed that the red and beautiful axis is seen. The red coral is quite different from the reef-builders. In the latter the animals rest in cells in the very body of the branch, as it were, but in the red coral they are in what might be termed the bark, so that when a branch is scraped no evidence of a cell is seen.

In a number of sections in New York State, as the Helderberg Mountains, large coral reefs can readily be traced, and the specimens though hardened in the solid rock still show their form and structure. These entombed skeletons tell a wondrous story of the changes that have taken place, and show that in years gone by coral-reefs grew and formed in the far North. In those days the State of New York was under water; a difference in zones existed, and Boston, New York and the adjacent country had a temperature presumably like that of Southern Florida to-day, and a very similar state of things existed. In the Catskill Mountains I have walked over ledges where almost the entire surface was made up of sections of crinoids somewhat similar to those now found in East Indian waters. Here also were sponges entombed in the solid rock, trilobites or crabs; and in one glen, a veritable moss-covered arbor, not a stone or rock but concealed shells and various forms telling of the old ocean that rolled over the spot many ages in the past.

SEARCH-QUESTIONS IN GREEK HISTORY.

By Oscar Fay Adams.

IV.

THE GREEK COLONIES.

61. Mention the principal causes which led to the founding of the majority of the Greek colonies.

62. Did the colonies usually remain subject to the mother-city?

63. Where were the earliest Greek colonies founded?

64. State in a general way what portions of this territory were occupied by the Æolians, Ionians and Dorians.

65. Name the two most important Ionic cities.

66. Name the two most powerful Grecian colonies in Sicily.

67. Which of the Grecian cities in Sicily was governed by a despot reported to have burned his victims alive in a brazen bull?

68. What African nation was most hostile to the colonies in Sicily?

69. Where was Magna Græcia?

70. What is the most noteworthy event in the history of Magna Græcia?

71. What city of Magna Græcia is yet remembered for the extreme luxury of its inhabitants?

72. Name the city of Magna Græcia in which the proposer of any new law was obliged to appear in a public assembly with a rope about his neck which was at once tightened if he failed to convince his hearers of the need of the law in question.

73. Mention a noted Spartan colony in Magna Græcia.

74. What was the most important Grecian colony in Gaul? What is it now called?

75. What Grecian colony in Northern Africa was governed by kings for eight generations?

76. Between what mother-city and her colony was fought the first recorded naval battle? What is the colony now called?

77. Name an important Milesian colony on the Black Sea.

78. What Greek city founded the colony of Naucratis in Egypt?

79. What city was the home of the boldest navigators and extended its settlements as far as the coast of Spain?

80. From what people did the Greeks learn navigation?

ANSWERS TO JANUARY SEARCH-QUESTIONS.

21. Sparta.

22. An Oligarchy. In this form Grecian republicanism first appeared.

23. By the Tyrants or Despots who first appeared about the middle of the seventh century B. C. The tyrants were usually ambitious nobles who made the discontent of the common people with the oligarchies the pretext for making themselves supreme rulers.

24. Sicyon. The reign of its despots lasted for one hundred years.

25. Clisthenes.

26. Seventy-four years.

27. Periander.

28. It became the wealthiest and strongest of the Grecian commercial cities.

29. Thrasybulus.

30. The dithyrambus, a lyric form of verse in praise of Bacchus, was developed by Arion into public choral song at this time.

31. Anacharsis.

32. Theagenes.

33. To the oligarchical party.

34. It gives an account of the political struggles of the time.

35. By the Spartans.

36. With utter abhorrence. Even the mildest despots were unpopular.

37. In Corinth.

38. No, because the rule of the despots tended to disintegrate rather than to unite the Greeks.

39. Sparta.

40. Attica.



A YOUNG PRINCE OF COMMERCE.

By Selden R. Hopkins.

CHAPTER V.

A RECOGNITION.

WE can imagine the hearty welcome given young Vangrift at Williston, when he walked into the store and handed over to Mr. Harwood the bank's receipts for forty thousand dollars, and besides, over four hundred dollars in cash; having used for his two months' expenses less than a hundred dollars. Mr. Harwood complimented him and words of praise for his remarkable success were heard on all sides.

This manifestation of business insight, energy and dispatch proved one of the important stepping-stones to Albert Vangrift's future brilliant achievements. He accepted the praises with many grains of good sense, possessing sufficient force of character to keep himself properly balanced, and he at once settled himself down faithfully at work in Mr. Harwood's office as though nothing of an unusual nature had transpired.

"You were speaking of a movement to start a bank here, Mr. Harwood," said young Vangrift, referring to the conversation between them on the day the lad was so unexpectedly sent to New York. "Has there been any developments?"

"Yes, I am glad to say, and the prospects are favorable. The merchants want to see the bank organized with a solid capital of a hundred thousand dollars. They have something like fifty thousand pledged, and they are going to hold a meeting at Waldo & Brown's store next Monday afternoon to see what can be done."

"I suppose you will attend?"

"I expect to, though I don't feel I can take any more stock, as I have several heavy enterprises on hand that require capital. I have signed for ten thousand dollars worth, however."

"Would it not be better to organize with the fifty thousand capital than to delay, in case the other fifty cannot easily be secured?" asked Albert.

"I believe I shall recommend it; yet I should greatly like to see the thing start off with a hundred thousand," replied Mr. Harwood.

Monday came and the merchants of the busy town assembled at Waldo & Brown's to try and complete arrangements for organizing the bank. A few minutes before the appointed hour a gentleman drove up in front of the store, alighted from his carriage and walked hurriedly in. Stepping up to the counter he asked if Mr. Harwood, proprietor of the large store up the street, had been in. He was told that Mr. Harwood was then there, in the office in the rear part of the store.

"I should like to see him," said the stranger.

Mr. Harwood was called out and the unknown gentleman approached him with extended hand: "Pardon me, Mr. Harwood, for interrupting you. But I wish to make inquiry concerning a young man in your employ. You have a young man with you by the name of Vangrift, I believe?"

"I have."

"I am a little interested to know something about him. He is an orphan boy I understand?"

"He is. At least I believe he is."

"Would you object to telling me what you know of his character? You have always found him perfectly correct, have you?"

"Perfectly so, sir. I believe he is the soul of honor. I have always found him so."

"I am many times thankful for this information. I want to meet the young man before I leave the

place and shall probably give him a little assistance if he needs it. I understand you are to have a meeting here this afternoon for organizing a bank in your city. I should think it a very wise movement."

"This is a preliminary meeting merely, to talk matters over and canvass the prospects. Will you not step inside the office and wait a few moments? I shall be going up to my store very soon."

The two went inside the office where a lively talk among those present was going on. Mr. Waldo was just reading over the names of the the subscribers to the capital of the proposed bank and the amounts pledged by each.

"It amounts in all," he said, "to forty-eight thousand dollars. I should like very much to see the sum raised to a hundred thousand dollars. How many of those present will double the amount they have pledged?" As the speaker paused the room was silent. Each seemed to be waiting for some one else to speak. After a moment's stillness the stranger arose.

"Gentlemen," said he, "if you will permit a stranger a voice in your meeting I have a word to offer. Possibly I can help you along in this enterprise."

"Go on, go on," said half a dozen voices as the speaker paused.

"Then if you do not object, I shall propose to furnish the amount you seem to feel that you would like to obtain. I will add my name for fifty-two thousand dollars. This, gentlemen, will give me a majority of your stock. I do not desire especially to control the organization, and shall ask only one favor. I shall want the privilege of nominating a citizen of your town for a good position of some kind in the bank. But the position he shall have will be left entirely with the directors after they are chosen."

The stranger then sat down. All eyes were closely riveted upon him. A brief pause and Mr. Waldo arose.

"Will the gentleman have the kindness to introduce himself, and also name the person he refers to?"

"My name, gentlemen," said the stranger rising slowly, "is Joseph Crosby, of the firm of Crosby, Fuller & Co. of Boston, and" —

But he was interrupted with clapping of hands and shouts of "Good enough, Mr. Crosby!" "good enough!" "go on!" "go on!" from many voices.

"And the person I shall nominate for the position, and who I shall name to manage my interest is Albert Vangrift, a clerk in the store of your fellow townsman Mr. Harwood."

When he had taken his seat another roar of applause went up and the delighted Williston merchants and manufacturers rushed eagerly forward to shake the hand of him whose name was as familiar as that of their best friend. Nearly all present had had business dealings for many years with the firm of Crosby, Fuller & Co., though they did not know the face of the distinguished visitor. After a fair opportunity of welcoming Mr. Crosby, inquiries began to be made as to his interest in the young man Vangrift.

"I suppose you know the man personally," presumed one.

"He is a relative?" queried another.

"A splendid young fellow, anyhow," suggested a third.

"Gentlemen," spoke up Mr. Crosby, "if you will hear me a few moments I will make an explanation of my previous remarks. Young Vangrift knows nothing of what I have done here today. He does not know that I am here. He is not a relative, and I can't say that I have a personal acquaintance with him. But he is more than a relative, more than an acquaintance! His bravery and thoughtfulness saved the life of my daughter as she was about to be torn to pieces among the wheels of a powerful machine! The investment in this enterprise which I offer to make, I intend for the sole use and benefit of this young man. If my proposition is acceptable you can have my check for the amount at once."

"It is perfectly acceptable," said a dozen of the men.

"Nothing could be fairer," came other voices.

"He may have any position you name, so far as my influence goes," emphatically announced Mr. Waldo.

At this point the tall trim figure of Mr. Harwood, with his snowy locks and flowing white beard, was among them.

"Gentlemen," said he, "I want to add a few words. This is a grand surprise to all of us. But I feel it my duty to say something concerning the

young man whose name has been so prominently mentioned. He is a remarkable young man! Remarkable for his honor and integrity! During his employment with me he has displayed more than ordinary talent for business enterprise. It has been my hope that he would remain in my service and eventually assume the management of my business. However, believing it would not only be good for him but good for the stockholders also that he should have a prominent part in the management of our first bank I shall now move, Mr. Chairman, as a sense of this meeting that when the board of directors of the First National Bank of Williston have been chosen they shall meet and elect to the position of president of that bank, Albert Vangrift! I believe him in every way competent to fill that position."

This was a rather remarkable proposition; but, "Good! good!" responded half a dozen voices.

"I heartily second that motion," said Mr. Waldo.

"Those in favor of the motion please manifest by saying Aye," said the chairman.

"Aye! aye!" echoed from all parts of the room.

"Contrary, No. The vote is unanimous," said the chairman amid the excitement over the result. "I appoint Messrs. Waldo, Bucklin and Harwood a committee to wait upon Mr. Vangrift and escort him before this meeting."

Within a few minutes the committee returned accompanied by young Vangrift. As they came in the chairman arose and addressed the young man:

"Master Vangrift: It affords me great pleasure to inform you that by a unanimous vote of the gentlemen present, who are to be the stockholders and directors of the First National Bank of Williston, the capital of which has been fully subscribed, you have been named as the person who is to be the first president of that institution!"

The young man looked about him in amazement. He could hardly recover sufficient assurance to make a reply. After a pause of a few moments he broke the perfect silence with the following response to the chairman:

"Mr. Chairman and Gentlemen: Is this a dream? Can it be possible that I am not laboring under the influence of a prodigious hallucination! If this be a reality, I must pronounce the marvelous stories of the 'Arabian Nights' commonplace fiction as compared with it! I am incapable of expressing my wonder and astonishment.

"Gentlemen and friends: How can this be possible? I am here almost a penniless waif! He who stands before you is but an inexperienced clerk working upon a salary only sufficient to support the three precious orphans whose lives dearer than his own have been most unfortunately entrusted to his care and protection. Is it strange that my astonishment is so great, and that I doubt the possibility of such a circumstance coming into my lot? But looking into your faces, faces I have learned, during my short citizenship, to look upon with feelings of confidence, I cannot believe you would choose to thus ridicule me. I know your honor would not permit such an act. However, before I dare go so far as to express my thanks for this mark of confidence and regard I must beg a further explanation."

Almost exhausted with surprise the young man took a seat near his employer. There was scarcely a dry eye in the assemblage. His well-chosen words had touched a tender chord in each heart. These remarks were further evidence of his character and his ability. Naturally retiring in his disposition no one would presume at first acquaintance that he was a brilliant or a fluent speaker, but he was of that make-up which always proves equal to the emergency. As he took a seat Mr. Crosby arose and slowly walked towards him. Reaching out to take the young man's hand Mr. Crosby said:

"Master Vangrift: Having learned accidentally of the movement on foot by your fellow townsmen, I have made a special effort to be here to-day. What I have done for you has been only a partial recognition of your great service to me. I see you do not recognize me. It is true we might have met upon the highway and passed thoughtlessly as two strangers; as I should not have recognized your face as one I ever saw before. But it affords me an unspeakable pleasure to introduce myself to you in the presence of these gentlemen. I hope you have not forgotten Mr. Crosby of Boston. He has not forgotten you!"

The young man was unable to say a word; overcome with surprise. And as the old gentleman and the young man stood looking each other so earnestly in the face with firmly clasped hands, a thrill of admiration and thankfulness ran through the happy gathering. It was a sight not soon forgotten by any person who witnessed it.

(TO BE CONTINUED.)

WAYS TO DO THINGS.

LIV.

A COLLECTION OF PICTURES.

"NO matter how rich I am, or how many better pictures I have in my house," said a friend of mine, "that one shall always have a place of honor." He pointed to a landscape, not nearly so good as the other pictures in the room, and went on: "It is the first painting I ever bought, and I paid sixty dollars for it when I was a clerk on four hundred a year."

A young man must love pictures and know something about them before he is willing to give almost a sixth of his income for one, and to deny himself the dollar a week which he might spend for cigars and theatre-tickets.

The love of pictures is one that does not usually grow suddenly or pass away quickly. It is a taste that must begin when a boy or girl is very young. Indeed, no one is too young to make a beginning of what may one day be a gallery of paintings, or a fine collection of etchings or old prints.

A good way to begin is by saving every wood-cut from illustrated newspapers on a subject that interests you. I have seen a scrap-book of such woodcuts, illustrating London scenes which the collector said that he had never been able to find in photographs. Any one who has such a scrap-book as this feels at home the first time he goes to London, for the Punch-and-Judy shows, the boys eating oysters at street-stalls, the children building grottoes of the shells, the Seven Dials on a Saturday night, the cats'-meat men, and all the other street sights, are as familiar as the faces of old friends.

Another good collection is of pictures illustrating favorite stories, poems, plays or scenes in history. There are always such pictures in the English or American weekly papers which you can buy for almost nothing at the second-hand shops. You will find there, too, magazines at five cents each that yield woodcuts worth keeping. Steel engravings from art-journals are often for sale at these shops for ten cents apiece. Here are half a dozen of them, every one with its story: Undine riding through the woods, where elves sit with squirrels in the tree-tops, while her uncle, the fierce water-spirit, Kühleborn, tries to frighten her, and her husband gallantly defends her; Ariel, swinging in a morning-glory vine, and singing

> Merrily, merrily shall I live now,
> Under the blossom that hangs on the bough.

Geneviève of Brabant, driven into the woods with her child, by her cruel husband, and protected by a doe; poor little Louis XVII. in prison; his sister sweeping the floor of her cell; and Gérôme's famous Death of Cæsar.

When a large stock of heliotypes was damaged by fire and water a few years ago, it was bought by the ton and sold at a five-cent shop. Here was an "occasion," as the French say, for picture-lovers! Many of the heliotypes were in excellent condition, and most of them were from the Gray collection of engravings of rare portraits or pictures by the greatest masters. One friend of mine bought three hundred. Think of that for fifteen dollars! I did not hear of the sale until all the best heliotypes were gone, but I have fifteen or twenty, among which are some Hogarths, that make the life of a century and a half ago as real as the life of to-day. One, "The Indian Emperor, or the Conquest of Mexico," represents four children, in the costume of the day, acting a prison-scene before an audience of their friends. The faces are all portraits, and the little actors were a lord, two titled ladies, and the daughter of the Master of the Mint, at whose house the play was given. One of the sons of George II., the Duke of Cumberland, who was afterwards commander at Fontenoy and Culloden, is looking on with two of his sisters, and the rest of the audience are of noble families.

You can begin a collection to illustrate the styles of different artists. If you have friends who are going abroad, and wish to send for something that will give you the largest return for the money expended, ask for photographs from pictures. They are much cheaper in France and Italy than here,

and may be sent home free of duty unmounted, on wooden rollers. They usually come uninjured, although they once in a while show signs of having been opened in the custom-house. If you cannot send abroad, you can find copies in cabinet-size at the salesrooms of photograph companies in the large cities, which send catalogues all over the country, and fill orders through the mails.

One of the pleasantest collections of photographs that you can make is of illustrations of some favorite book. At one time, everybody who went to Rome brought home photographs to illustrate *The Marble Faun;* and no traveller left Florence without a collection of the scenes of *Romola.* These collections were for sale in the shops. There is, however, more pleasure in buying one or two photographs at a time, as a friend of mine bought them for two or three years, until she had enough to illustrate *Henry Esmond.* She then had a large, fine edition of the book bound in two volumes instead of one, with cabinet photographs inserted, mounted on cardboard. The faces of William and Mary, Louis XIV., Queen Anne, Addison, Steele, and many another famous character look out from the pages, and views of Temple Bar, the Temple Garden, St. Paul's, Chelsea, Trinity College in Cambridge, Winchester Cathedral, the Church of Saint Gudule in Brussels, and, indeed, all the scenes which could be found, make the story a real chronicle of historic events. *Westward Ho!* is another good book to illustrate with photographs of Devonshire scenes and portraits of the poets, sailors and statesmen of Queen Elizabeth's time. Raleigh, Spenser, Sidney, Drake, the queen herself and Mary of Scotland are only a few of the procession of historical characters that moves through its pages.

The South Kensington Museum publishes for the English Government photographic copies of portraits from Henry VIII.'s time down, at two shillings each, and has, I think, a catalogue of them. A money-order for fifty cents will bring back a portrait of any favorite character in English history for three hundred and fifty years. I have seen a life of Mary, Queen of Scots, bound in four volumes, instead of the original two, and illustrated with copies of every portrait of the queen herself which could be found, and also portraits of the celebrated characters of her time, and colored prints showing the costumes of the period. One of the five-cent heliotypes of which I have spoken, is from a rare engraving of a stiff full-length portrait of Mary, with her son by her side, a strange little figure in a high hat and skirts touching the ground.

A long time ago, more than twenty years, certainly, I saw in a shop a framed engraving of Stothard's "Canterbury Pilgrims," a picture which pleased me so much that I should have been glad to own it. It was, however, quite beyond my means, and I never saw it again until it appeared in wood last year in a London architectural paper. A proof copy, not folded, was for sale for a shilling at the office of the paper, and now I can look every day at the jolly company, knight and squire, priests, nuns, wife of Bath and the rest, smiling out of a plain oak frame.

You may like to look into a portfolio that belongs to two young collectors. It is a plain, large, well-made one, only a little rubbed and shopworn, that was bought for fifty cents when a picture-dealer was "selling out," and in it is a large lithograph of one of Rosa Bonheur's strong work-horses, that cost ten cents at the same sale. Here are half a dozen colored prints from the London illustrated papers, most of them of battles and horses, that the boys will be tired of and give to younger children before many years. Two of the Hogarth five-cent heliotypes have come from another portfolio, because they are illustrations from *Don Quixote,* that we are reading just now. One is the adventure of Mambrino's helmet, the other the funeral of the verse-making shepherd. Next comes a photograph of one of the great portraits at Versailles — a group of Marie Antoinette and her three children. The baby was the poor little Louis XVII. of whose prison-picture I have spoken, and we have read the sad story of his life in Harriet Martineau's *Peasant and the Prince.* To keep these little royal people company is another five-cent heliotype of Velasquez' Infanta Marguerite, a dear child, the daughter of Philip IV. of Spain. A photograph of the Parthenon makes the history of Greece more real to the older boy, and some French farm-pictures appeal to the country-loving tastes of both. One is of massive farm-horses with great sheepskin collars, another of a flock of lambs, a third of a girl feeding a calf, and the last of a pig and some fowls. They are the most expensive pictures of the collection, for they cost

fifty cents apiece. Here is a real etching, taken from an art-magazine, "A Straggler of the Chevalier's Army," a weary, ragged Highlander, looking fiercely at the rabble following him through a little English village on a rainy day. There is a great deal of history in this etching for a boy who thinks that there is no writer like Scott, and is fresh from *Rob Roy*, *Waverley*, *Redgauntlet*, and a life of Prince Charlie.

There are history and poetry, too, in these views of Melrose Abbey and the Border castles. Victor Hugo's grand head, and a portrait of General Gordon, a knight as stainless as Sir Galahad in the woodcut next him, are all the other pictures especially worth mentioning.

If your collecting is anything more than a child's fancy, you will like to read a paper by Philip Gilbert Hamerton called "The Poor Collector," in *Longman's Magazine* for September, 1885. You will also enjoy a great deal in the same author's *Graphic Arts* and *Etching and Etchers*, which I hope may be the beginning of many years of art-reading.

—*C. M. Hewins.*

LV.

A SQUIRREL CAGE.

THOSE boys who would like some quick, easy, cheap carpentry, may make a good substantial squirrel cage in the following manner: Take a piece of board an inch thick, eighteen inches wide and three feet long for the bottom. Fasten upright boards about three feet high at each end, with the tops rounded. Now buy from any dealer in hardware, a piece of coarse strong wire netting long enough to go over your wooden frame; nail it securely to the end pieces, and to the bottom board on one side, bending it over the rounded top. If you nail with stout tacks, the fastening will be strong enough, and there will be no danger of splitting the wood of the ends.

Along the front of the cage the netting should stop within three inches of the bottom, so as to leave room to put in a drawer, like the drawer of a bird cage, which you must pull out and clean every day. Make this drawer of a sheet of tin. Any tinsmith will turn up the sides for you, leaving the front a little higher than the other side and ends in order to overlap the netting on the outside.

If you can procure the wire netting only of a certain width, grade the length of your cage accordingly.

If you can get a stout branching bough of some hard wood, fasten it securely from end to end of the cage before putting on the wire covering, as your pet will enjoy climbing about on it much better than running in a revolving cylinder, which is neither healthy nor natural exercise for a squirrel. The end boards should also be lined with tin if they are not hard wood, as the sharp teeth of your pet will soon make havoc with them.

Now for the door: Cut a neat, square door four by four inches, and about three inches from the bottom, in one of the end pieces; you can fasten it by hinges and a strong button.

For the sleeping apartment cut a round hole in the other end board near the bottom, about three inches in diameter, and then fasten upon the outside a neat little tin box, the bottom of which must be level with that of the cage, so as to present the appearance of a tiny extension. In this box, there must be a hinged door large enough to allow you to change the bedding frequently, which should be of clean dry moss or of cotton-wool.

You can also cut a small hole in the wire netting at the top of the cage large enough to admit a nut, and your squirrel will soon learn to climb up and take food from your hand. After cutting the hole, bend back the ends of the wires, so as to leave no sharp edges. Give the squirrel a little milk occasionally. You can put water in a dish like a canary's bathing-cup, which is low enough to slide in and out with the drawer. The squirrel will soon learn to eat bread, wheat and corn, and if gently handled will soon learn to come when called and run over his master. If you are ingenious, you can make a neat and comfortable cage from these directions at a trifling expense.

—*Carlos Shelton.*

SOME SUCCESSFUL WOMEN.

By Sarah K. Bolton.

V.

MARY VIRGINIA TERHUNE ("MARION HARLAND").

TO be a successful writer of novels and of cookery books, the helpful wife of an eminent pastor, a leader in all the benevolent work and social life of a city parish, and a most careful and responsible mother, show, to say the least, great versatility of talent and great executive ability. Such a woman is "Marion Harland."

Born in Amelia County, Virginia, of a father descended from Puritan stock, Samuel Hawes of Dorchester, Mass., and of an equally intelligent and refined mother, whose ancestor was the brother of Captain John Smith, the young girl came naturally into an inheritance of marked traits and talents, energies and convictions.

At ten years of age the little Mary Virginia was absorbed in Rollin's *Ancient History*, having read to the fifth volume. The faithful, thoughtful mother encouraged her children to read to her while she sewed, and thus Virginia and her sister went through Pollock's *Course of Time*, *Pilgrim's Progress* and Plutarch's *Lives*, and knew by heart whole pages of *Paradise Lost*, Cowper's *Task*, and Thomson's *Seasons*. For light reading they indulged in *Godey's Lady's Book* and *Graham's Magazine*.

Beginning to write for the press at fourteen, Virginia had a story accepted at Godey's when she was sixteen, called "Marrying Through Prudential Motives." This story was copied into an English paper, translated into French for a Parisian journal, re-translated into an English periodical, and finally copied in America as an English tale. About this time, too, she won a fifty-dollar prize for a story; and so pleased were the editors that they advertised to learn the real name of their anonymous contributor.

Thus encouraged, the young Southern girl determined to write a novel. When it was finished, she broke the astounding news to her father.

"How long have you been writing it?" he asked.

"I wrote the rough draught three years ago. Within a year I have written it out in full. I should like to publish it."

So the manuscript of *Alone*, a very famous novel in its day, was taken to a Richmond publisher for examination. The young author waited for days and weeks and months. Finally, the father asked that the manuscript be returned, and with it came this note:

"I regret that the young author's impatience to regain possession of her bantling has rendered it impossible for me to read more than three pages of the story. From what I *have* read, however, I judge that it would not be safe to publish it on speculation."

Mr. Hawes believed in the ability of his daughter, however, and at once assumed the expense of publishing. "Bring it out in good style, printing and binding," he said; "advertise it properly, and send bills to me."

Alone was published when Virginia was twenty-one, and at once made a genuine and wide sensation. It was a pure and beautiful story, and it was written in clear, fine English. "Marion Harland," for thus she signed her literary work, suddenly found herself famous. In less than two years a Tauchnitz edition appeared, and in these thirty years since over one hundred thousand copies of *Alone* have been sold, a record attaching to very few books.

The following year, 1855, a second novel, *The Hidden Path*, came from her pen, and that also met with a large sale.

Meantime another great happiness had come into her life. Edward Payson Terhune, the son of Judge John Terhune of New Brunswick, N. J., had been licensed to preach by the Presbytery, and had accepted a call to Charlotte Court House, Va. This is a place abounding with historical associations. Here Patrick Henry made his last public speech and John Randolph his maiden address. Both these statesmen are buried in the neighborhood. Here, when "Marion Harland" was twenty-three, she came as a bride. The mar-

riage was a love-match, and has brought her a domestic life of unusual happiness. It is said, in proof, that for nearly thirty years, whenever Dr. and Mrs. Terhune have been absent from each other, they have never failed to write daily letters.

"Marion Harland" did not lay down her literary work when she assumed her household and church duties. She merely "economized time," and found hours for each. In 1857, a year after her marriage, *Moss-Side* was published.

The next year Dr. Terhune was called to the First Reformed Church in Newark, N. J., where



MARY VIRGINIA TERHUNE ("MARION HARLAND").

he and his family spent eighteen happy and useful years their home a centre of delightful influences.

The pretty children, of whom there were six finally, evidently did not hinder the mother's literary work. The writing of *Nemesis*, a novel which appeared in 1860, was attended by amusing circumstances. Mrs. Terhune's writing-table stood near a favorite window; and to the leg of this table she tied one end of a string, the other end being attached to the railing of a cradle, set in a darkened corner where Baby Christine took her long forenoon naps. When Baby moved, the mother, without distraction of thought, touched the string.

In 1863 *Husks* was published; in 1865 *Husbands and Homes;* in 1867 *Sunnybank* and *Christmas Holly;* in 1868 *Ruby's Husband*, dedicated "*To him who for many years has been to me adviser, co-worker and best earthly friend*"; in 1869 *Phemie's Temptation;* in 1870 *At Last;* in 1871 *The Empty Heart;* in 1873 *Jessamine;* seventeen novels in all, pure, and elevating books which have had a wide reading.

When "Marion Harland" was married, friends thoughtfully bestowed upon her five different cook-books. Each was unlike the others, and often contradictory; and the more the young housekeeper experimented, the more perplexed she became. At last, however, as good receipts proved themselves, she laid them aside for future use.

These choice and reliable receipts in fifteen years had grown into a useful collection. Thinking she might benefit young housekeepers, in 1870, she visited Scribner & Co. and offered to them the MS. of her now world-famous *Common Sense in the Household.*

They hesitated about accepting. "It will not amount to much," remarked Mr. Scribner to his partners, it is said, "but perhaps by taking it we can obtain a friendly hold upon her and so be given the publishing of her other books."

But "Marion Harland" was already known to the women of the land as a true-minded Christian woman, and they said, "We can depend upon what she states." It followed that the sale of the book was an astonishment to the publishers, and probably to the author as well. Since its publication one hundred and fifty thousand copies have been sold in America, and half that number abroad. It has been translated into Arabic, French and German, and a special translation is soon to be issued for the use of German residents in America. This Mrs. Terhune considers a worthy and precious success.

Other kindred books have since come from her pen, constituting a "Common Sense" series: *Breakfast, Luncheon and Tea*, and the *Dinner Year-Book.* The first is made up of entirely fresh instructions, with some admirable "Familiar Talks" on the need of every woman to have a trade or profession, and on various other home-topics. "How many women," she asks, "could, if bereft of fortune or support to-morrow or next week, or next year, earn a living for themselves,

to say nothing of their children?" The latter book contains a bill-of-fare for the dinner of every day in the year, besides twelve company dinners. In 1883 *The Cottage Kitchen*, composed of inexpensive receipts, was published; in 1885 *Cookery for Beginners* (D. Lothrop & Co.), and a *Common Sense Calendar*, with a receipt for each working-day in the year, and some helpful words of counsel.

Notwithstanding all this practical work with her pen, "Marion Harland's" benevolent and church-work has yearly grown more extensive. During her husband's pastorate in Newark, Mrs. Terhune became the President of the Women's Christian Association, holding the office until her removal from the city. The Society had five different branches of labor. One "hard winter" they gave work to more than three hundred sewing-women, opening and conducting a store for the sale of garments made. So skilful was the management that while thousands of dollars were paid out, and thousands of articles sold, in the spring a small balance remained in the treasury, even after all their generous giving of money.

One incident will perhaps illustrate "Marion Harland's" force of character as well as nobility. In January, 1874, she buried one of the most gifted of her children, the "Ailsie" of her book entitled *My Little Love*. A month before this she had ruptured a blood-vessel in her right lung. The grief and excitement of the child's sudden death resulted in a hemorrhage, and she was confined to her bed. Two days after the funeral the chairman of the "cutting-out committee" of the Association, called and desired to see Mrs. Terhune on pressing business. Two hundred women were at the work-rooms waiting to return home with work. The treasury was empty. There was not a yard of material to be cut up. The women were depending upon this work for bread. What could be done?

Mrs. Terhune, ill as she was, determined to see her; and she has often said that she thinks this visit saved her reason, and perhaps her life. She was obliged to forget her darling child and think and act for others She sent her friend to a store where she had previously made purchases, and asked that a number of pieces of cloth be delivered immediately at the work-rooms.

Then she arose, dressed herself, took her carriage and drove to the office of a kind-hearted merchant. He came to the curb-stone and she stated the case briefly. He cast one look at her pale face and her mourning dress, and his eyes filled with tears.

"Wait a minute," he said, as he turned back into the office.

Re-appearing, he handed her a check for a large amount, and notes to half a dozen wealthy men which would, he said, "save her voice from the strain of telling the story."

Within an hour, Mrs. Terhune was making her way through the rows of anxious sewing-women, to the hall where twenty pairs of shears were flying through the rolls of cloth, and laid before the treasurer a package of bills — sufficient to pay the poor workers for three weeks, and to provide materials for a month's operations. So heroic can a woman be who has strength of character and a tender heart.

The same winter the Association netted a thousand dollars by a single performance of the cantata of *The Haymakers*. The chorus of fifty voices, and the members of the orchestra gave their services; but each represented one or more, and sometimes a half-dozen calls from the President, but she found time for the work. She often says she has become an optimist in charitable undertakings, for she "has found people ready to help in every good work, provided they are approached in the right way. Tact in this respect goes as far as energy."

While in Newark she taught a large Bible class of young girls, and was also superintendent of the Infant Department of the Sabbath-school. After Dr. Terhune was called to the First Congregational Church in Springfield, Mass., she took charge of a class of young men, beginning with eight. When they removed to Brooklyn, N. Y., five years later, Dr. Terhune being called to the First Reformed Church, there were sixty-eight young men on the roll, and a noble body of workers they were. They had their own class-rooms adjoining the main Sunday-school rotunda, which they fitted up as reading and sitting-rooms, and these they kept open during the week.

Mrs. Terhune has a similar class in Brooklyn, N. Y., who call themselves "her boys," and for whom she has an affection largely akin to that felt for her own children. She says:

"My heart yearns unspeakably over all young

things that need love and training. I think two thirds of me is 'mother.' This was the motive that induced me to accept the editorship of *Babyhood*. Letters from all parts of the country ask what are my methods of managing classes; and of making friends of boys and girls. I know but one secret: to love and sympathize with them. God bless them one and all! 'My boys' are scattered far and near, all over this and other lands, but they still write to me, telling me of their prospects of business and happiness, ask congratulations when they marry and sympathy when they bury their dead."

In Brooklyn, Mrs. Terhune is one of the managers of the Training School for Nurses, a member of the Local Visiting Committee of the State Charities' Aid Association, a Vice-President of a Musical Association and First Director of the Ladies Association of her husband's church.

The broken blood-vessel above mentioned did not heal. In 1876 a consultation of physicians said Mrs. Terhune had not three months to live. Her husband with his usual promptness and decision, sent in his resignation to the Newark Church by whom he was greatly beloved, sold his home, furniture and horses, "burned the bridges behind him," as he said, and took his wife to Europe, where they remained for two years, he acting as Chaplain of the American Chapel in Rome the first winter, and the second supplying the American Church in Paris. Mrs. Terhune became entirely restored to health, and now, a little past fifty, seems in the very prime and full joy and activity of a vigorous womanhood.

She has learned how with no appearance of care to constantly care for her health, varying her occupations to relieve one another, and giving full time to sleep and to out-door exercise, especially to walking.

On her return from Europe she wrote *Loiterings in Pleasant Paths*, a most interesting and delightful book combining fine description with much of history, and evincing wide reading and culture.

One of Marion Harland's most valuable volumes is entitled *Eve's Daughters*, devoted to hygienic common-sense for maid, wife and mother. She urges broad education for girls. She says:

> Mary may not "keep up" her Latin after she leaves school, and her German may, from the same date, become to her as truly a dead language. But she will write and speak her mother-tongue the better for having learned the one; the breadth and grasp of her mind be improved by the study of the other.

She has carried out this idea in the education of her own children. Her eldest daughter, though married, fitted herself for the chair of English Literature in any college, and reads and converses in five languages. Among other literary tasks, she and her mother have charge of the Household Department of a syndicate of fifteen papers.

How has "Marion Harland" accomplished so much work? By economizing time; using spare hours and minutes to shape articles, and carry on stories, and while cooking or sewing, watching for the opportunity to write. All her life has been subject to interruptions; her best working-hours years ago were when her children were in bed. Now she is usually at her desk from nine o'clock until one, never writing or studying in the evening if she can avoid it.

She says: "Domestic duties have never hampered me. On the contrary, I work better than if I had not thus had time to think over a composition before rushing it into print. I have knit a pair of cradle blankets for my grandchild in the intervals of composition, thinking out page by page, as the needles played, and laying them down now and then, to commit the digested thought to paper. One learns contentment and concentration of thought by such discipline of daily life, and to manage temper and mind together."

She once said to me: "I love my kind and have tried to help women. If the lowly places of life are brighter, daily burdens that must be borne lighter because I have lived and worked, I am satisfied. I believe it is possible to elevate household 'drudgery' into a Mission; to make Home the centre of thought and duty, and yet help the toilers in other homes."

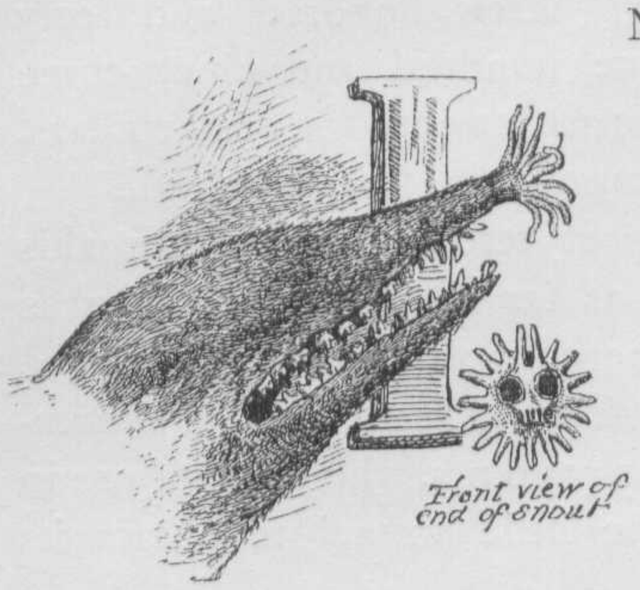
Truly, this woman has glorified the commonplace. In behalf of domestic home-making women everywhere, in cottage and in mansion, she has bestowed shaping thought and refining care upon a thousand details of household comfort; through her influence countless women have learned to look upon cookery as a fine art. Her influence upon the home will endure for more than this generation; indeed it may be regarded as one of the forces of our time that determine what shall be the beliefs and ideals of the woman of the future.

WONDER-WINGS, MULLINGONGS, COLOSSI, AND OTHERS.

By C. F. Holder.

V.

HOMES UNDERGROUND.



SNOUT OF STAR-NOSED MOLE.

IN the last century a Swedish prisoner-of-war named Müller, who had been confined in Siberia, returned from that cold and desolate country, bringing with him many curious tales from the North, which caused no little wonder and excitement in the quiet city of Amsterdam. For a long time he entertained his old neighbors and friends gathered about the evening fire, rehearsing his experiences and relating stories. Among the latter was one which seemed to fascinate his listeners more than all the rest. This favorite story was simply about a rat; but a rat enormous, and very terrible to look at. Müller did not profess to have seen the animal himself; but he had talked with many natives who had, and one and all averred that this *tien-shu*, the gigantic underground rat, was the most marvellous of all creatures.

Müller's informants told him that the animal was never seen above ground, and that they had often crept into crevices of the earth formed by it as it ploughed along in the Ural Mountains, digging out the soil with two huge horns which were fastened to the head just above the eyes. These horns the natives valued very highly, and sold them as ivory; but they could only be taken when the animal was dead. Many horns were obtained, however, as the rats often perished by trying to burrow in soft sand, when the treacherous material would pour in and smother them. Some had seen the animal alive in grottoes on the other side of Beresovsk, and all concurred in the belief that it died as soon as it saw the light. They stated, moreover, that its flesh was remarkably cooling and wholesome.

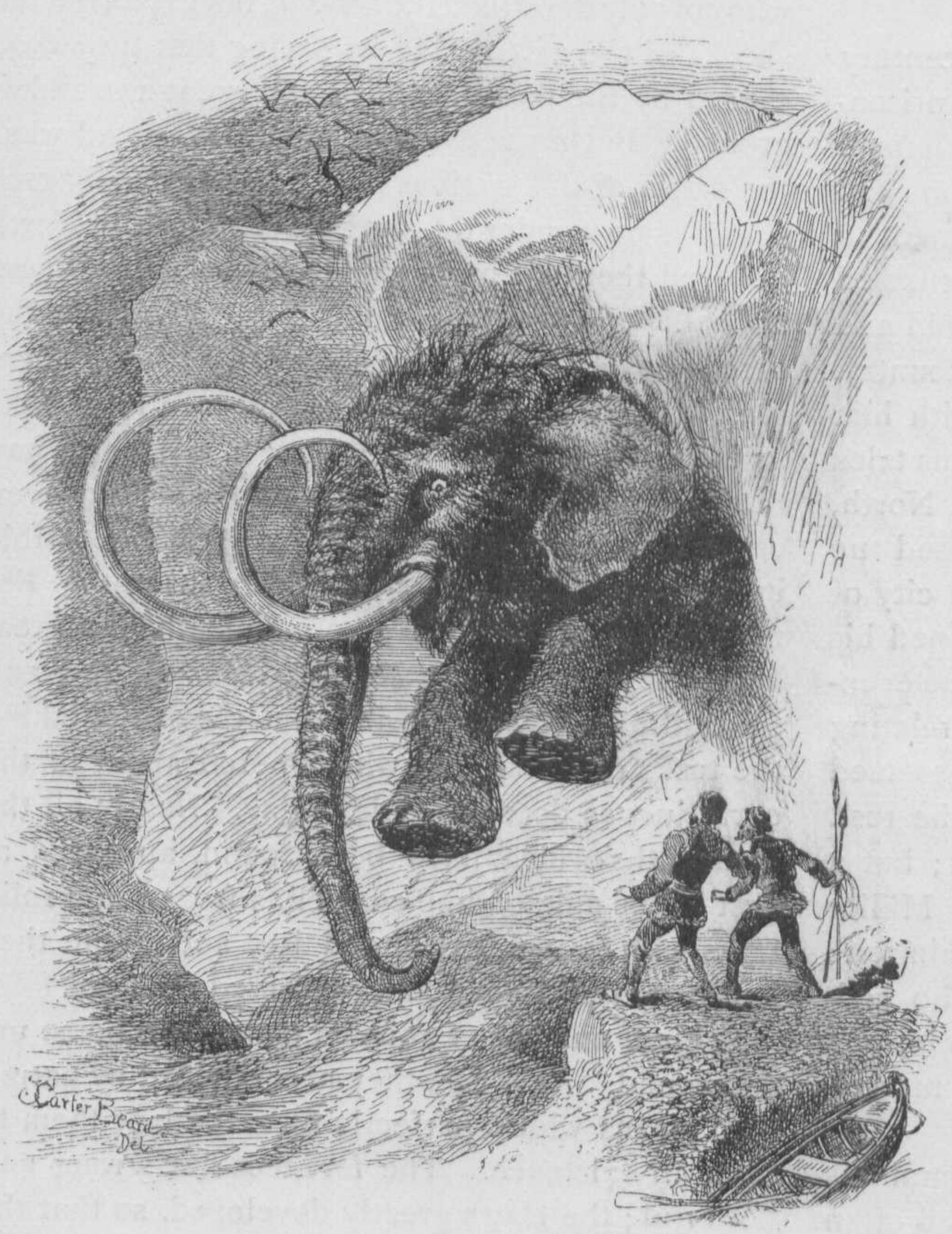
Nor does Müller's story lack confirmation if we may believe the account of certain Chinese *literati*, who not only described the *tien-shu*, but explained the shocks of the earthquake by saying that they were caused by the movements of the great rat underground. But my readers will have suspected what the origin of this curious belief was, and will agree that it is no wonder the simple people of the North believed the huge mammoth to be an underground animal. Did they not always find it beneath the surface? Had not their fathers and grandfathers seen it washed out of tundras and torn from cliffs and ice-heaps during the spring floods? and had they not fed their dogs on the flesh, and even eaten it themselves? What was there impossible in the story? all the facts pointed to its truth. For many years the ivory of the mammoth, the great hairy elephant of the North, was collected and sold; the natives supposing that they were taking the tusks of an animal which bored about in the earth just as does the mole to-day. Nearly all the mammoths which have been found, appeared at first in the side of immense cliffs frozen in a solid mass with gravel, earth, and ice, and where they had been imprisoned and preserved for ages.

A large number of animals make their home underground. As a rule they are provided by nature with means which perfectly fit and adapt them to such an existence. The fore-feet are strong and powerful; the claws greatly developed, so that the earth can be thrown out quickly; and we find that some have veritable sacks or bags in which the material is carried out.

One of the most familiar of our underground livers is the common mole, whose work can be seen all over our Northern orchards of a morning; showing that their tunnels, like those of the fabled *tien-shu*, have been made with remarkable celerity. But however well the mole is known by its ridges, there are comparatively few people who ever see moles alive, for the simple reason that the little creatures are extremely timid and shun the light, coming out only at night. The only one that I

have ever seen moving about during the day was one which a cat had caught in the deep grass of an orchard.

The mole is a thorough subterranean worker. Its entire make-up tells of a life underground. It is, comparatively speaking, blind, its eyes being mere specks; the smallest black bead will represent them. It is often stated that the mole has no eyes, but this is an error; and as insignificant



"THE GIGANTIC UNDERGROUND RAT."

as are these little organs they are present, the lens consisting of a small number of minute cells. The retina is not so elaborate as seen in other animals; and probably some moles *are* blind from the fact that the optic nerves, which carry the picture to the brain, have become degenerated by disuse.

But if it has poor eyesight, the mole possesses a remarkable nose and a powerful scent, which fully make up for any optical deficiency. This scent enables it to capture all the worms and insects which lie in the path of its burrows; and that these little creatures are a valuable ally of the farmer is evident from the fact that it is estimated that a single one devours twenty thousand insects a year. Actual experiment has shown that one will devour four hundred and thirty maggots, and two hundred and fifty grubs in four days. One under observation ate eight hundred and seventy-two maggots and three hundred and forty grubs in twelve days; and in another instance two of these voracious little animals ate in nine days three hundred and forty grubs, one hundred and ninety-three earth worms, twenty-five caterpillars, and a mouse, skin, bones, and all.

The most remarkable mole in this country, as far as appearances go, is the star-nosed mole; so called from the fact that from its nose radiate a number of fleshy points, which are of use in aiding the little animal to obtain its prey.

All the moles are noted for their burrows; but in the elaboration of its home and the architectural skill exhibited, the English mole, *Talpa europea*, is without a peer amongst all underground animals; and when we consider that this habitation is built in the dark, and by a creature presumably low in the scale of intelligence, it is most wonderful.

Although the ridges of the English mole are seen extending in every direction, the little creature really confines its maraudings, if so its excursions here and there can be termed, to a comparatively limited space. The fortress or nest is at one end, and is a most complicated affair, generally built near the roots of a tree or under a prominent hillock which is firm and well packed, and when finished is a room surrounded by two galleries supported by five pillars which are separated by as many passages leading above and below. In the centre of the lower gallery and beneath the upper, the nest is formed, and the young reared. The upper gallery can be reached from this by three passages, and there is another which extends downward at first for some inches, and then rises again, joining a high road which, next to the nest, is the

most important feature of this subterranean home. It extends in nearly a straight line from the fortress, and is the highway from which all the roads lead. It is just wide enough for a single mole to pass, and when two meet, and both are determined, a contest ensues; but usually one will retire into some of the numerous passages which branch off from it. These radiations are the hunting-grounds of the little animal, and wind about, crossing and passing each other in a wonderful manner, and are continually being added to by the hungry hunters. From the high road at least nine branches lead to the upper or lower gallery of the nest, and in making these tunnels the little worker is careful not to have the doors or openings of the upper gallery over those of the lower; in fact, everything is arranged to render escape easy in time of danger; the runs, alleys, and by-ways, all are constructed with that end in view.

While the mole is apparently a clumsy creature on the surface, its movements are extremely rapid underground. Some curious experiments have been made to test its speed. Thus a French naturalist, having ascertained that a mole was at the end of the high road farthest from the nest, inserted a horn into the tunnel near the end, the mouth-piece being out of the ground, and then placed several little flags which penetrated the tunnel, along the route, hoping that when the mole darted away it would knock them over in succession, and so its speed be determined. The experiment proved a perfect success. When the little animal was supposed to have reached a locality near the end of the road the naturalist blew a loud blast upon the horn, which undoubtedly reverberated through all the tunnels and passages, sadly frightening the mole, which started at a tremendous speed down the road toward its castle, the spectators observing the flags go down in such rapid succession that they expressed the opinion that it was travelling as fast as a horse could trot.

When the first white travellers penetrated Australia they heard many curious stories concerning an animal the natives called the mullingong or tambreet. So remarkable were the descriptions that the creature was considered fabulous. One Australian endeavored to describe it by showing a duck's bill, a cock's spur, and the fur of a cat, to which combination he added the webbed foot of a duck, all of which, he said, the mullingong possessed. Moreover, it was a swimmer, a water-loving animal, and formed extensive burrows deep in the ground for the preservation of its young. An animal having the characteristics of bird and beast would certainly be a novelty; but finally the mullingong was discovered and found to be no less a wonder than the description of the natives implied.

This strange creature is now known as the duck-bill or Ornithorhynchus, and really combine the features of several different animals. It is an aquatic milk-giving animal, about eighteen inches long, covered with a rich chestnut-brown fur. Its mouth projects into a horny bill as perfect as that of a duck, and is furnished with several hard rounded teeth. Just back of this are the shining bead-like eyes. The toes on the front-feet are webbed, as in a duck, and the hind-feet of the males are armed with a perforated spur. In fact, a stranger combination could hardly have been conjured up by the most vivid imagination, and as if this were not enough, it is now known that this milk-giving, bird-billed little creature lays eggs like a reptile, from which the young are hatched.

These quaint creatures are quite harmless, and are easily tamed, making exceedingly interesting pets. An English naturalist, who spent a number of years in Australia in order to study their habits, kept many of them about his place. They would climb upon the furniture in the room and upon his shoulder, and go to sleep on his lap coiled up in a perfect furry ball. In their native state they live upon insects and small animals, which are found on the bottom of streams, to obtain which the little creatures swim along, overturning the stones with their curious bills.

The home or nest of the duck-bill is far underground, and is, as a rule, begun under water at the bank, so that it is extremely difficult to find. Usually the natives' method is to walk along the side of a river or stream, and pierce the ground with a long sharp stick. The burrow is gradually worked upward until it is perhaps four or five feet from the surface of the water, or at least above the possibility of a flood when the river is high, and then runs down for a number of feet, finally leading into a large room. Here grass, leaves, and other material are taken by the duck-bills and the nest made, upon which the eggs (as a rule, too) are deposited. Very little is known concerning

their habits or those of the young; but that the parents are very skilful in hiding their home from intruders is evident. The discovery that these animals laid eggs is one of the most remarkable and interesting of modern times.

Some years ago a curious underground home was discovered in the islands known as "The Chickens," off the east coast of New Zealand, which gave shelter also to three entirely different animals, which seemingly lived together in friendship; perhaps for the reason that they were all harmless and not particularly aggressive. The owner of the home was a little bird, a petrel; better known to us as the Mother Carey's chicken. In these bleak islands the birds had made their nests, burrowing into the soil in such vast numbers that in certain places the ground seemed entirely honeycombed by them. At the end of the long tunnel, a room was widened out, and a soft bed made of moss or grasses, upon which the eggs of the petrel were laid. On the other side of the room was another occupant — a disagreeable-looking lizard, known to science as the *Sphenodon punctatus*. The latter never ventures out during the day, and lives to a great extent upon the food brought in by the petrels. According to some authorities the lizards sometimes make the burrow and the birds become the intruders. The third member of the trio is a rabbit — a strange family certainly.

It is a common saying in Southern California that the rats live in trees and the squirrels in the ground. This is true to some extent, as a wood-rat builds a large nest in the trees, and certain squirrels burrow.

In a small field in the San Gabriel Valley I have counted the heaps of twenty or thirty of these squirrels; the little animals darting about here and there, or standing upright, and so resembling the soil in color that it was often difficult to distinguish them. The holes of these squirrels are very large, and are sometimes inhabited by a small burrowing owl. These owls are very comical fellows and very social. In riding through the valley where their holes were a characteristic feature, I was obliged to be constantly on the lookout to prevent my horse from falling into them; and occasionally when a bird would appear, and I would gallop in chase, it would fly a few yards, and when routed again hover overhead not twenty feet away, and snap its beaks and shriek with rage, showing all the petulance of a spoiled child annoyed at being disturbed.

In riding through a cañon in the Puente Hills, foot hills of the Sierra Madres, the sides were seen to be burrowed every few yards with the nests or homes of two species of owls, which presented a comical appearance, especially one, called the "monkey face," as they sat on the heap of dirt in front of their doors and blinked wisely at us.

The most interesting underground home in this country, however, is that of the great tarantula or trap-door spider. Some of these, which I have seen farther South, if placed in a saucer could rest their legs on the edge all around, and are the veritable giants of their race. An ally in South America captures small birds, but the one first mentioned is a subterranean dweller, living on small animals and insects. The nest is built in adobe ground, which is a hard clay-like soil. When a place is selected, the spider proceeds to excavate it in a circle with its mandibles, taking it out piece by piece, until finally a well from six to eight inches deep is seen. It is now rounded off so as to present a regular surface, but is even then too rough for the tender body of the spider to rest against, and may be compared to a house all finished but the door and plastering. The latter is quickly accomplished; the spider attaching a thread of silk to the top, spins on, passing round and round until a perfect sheet of shining silk covers the whole interior, hanging on the wall like a delicate lace or silk tapestry, and forming a veritable ladder for the spider, whose sharp claws catch upon it with the greatest ease.

The lining finished, the patient worker turns its attention to the door, which is the most remarkable feature of this curious home, being fastened to the side by a hinge, and so perfectly adjusted that it closes itself after the spider has passed out. The door is made by attaching silk upon one side, after which the tarantula moves as before round and round, gradually forming a silken door, ranging in size from a silver dollar to a fifty-cent piece, depending upon the size of the opening. As it approaches completion this door is, of course, extremely light, and so the spinner weights it down with adobe until finally, when finished, it is flat on top, the exact color of the surrounding soil, and fits the opening so perfectly that the sharpest eyes

fail to see it, and, moreover, it is absolutely water-tight. The little owner has no difficulty in opening it; and in returning to the nest deftly lifts up the cover, and slips in so quickly that many a pursuer is mystified. If an enemy does discover the secret the spider will often turn and seize the lower part of the door, which is a soft cushion, and by bracing back, with feet against the side of the tunnel, hold it so strongly that considerable exertion is required to lift it; when all efforts fail the spider will sometimes allow itself to be pulled out, and then makes a desperate leap at the enemy. A gentleman in Los Angeles informed me that one of these spiders sprang nearly two feet at him.

In South Africa a very curious subterranean home-maker is found. The natives call it the ground-hog, from its resemblance to one of these animals, but it is better known as the aard-vark. Like all the diggers it has powerful claws, and has, perhaps, more of a motive to dig than many others, as its food consists almost wholly of ants, which it digs out of the ground. Some idea of the rapidity of its movements underground can be obtained from the fact that one that was once observed by a hunter walking along, succeeded in digging a burrow and disappearing before he could reach it. Their homes generally lead downward at a sharp angle, and are then enlarged into a commodious chamber in which the family of the aard-vark resides.

The ants which constitute the food of these curious creatures, are themselves perhaps the most ingenious and interesting of all underground miners, and the skill and ability displayed in some of their works show something more than instinct. The homes of the Termites, or white ants as they are incorrectly called, having little affinity with true ants, are perhaps the most remarkable. The nests are enormous mounds, often ten or twelve feet high, and twenty-five or thirty feet in circumference, and so solid that man and large animals can mount them with perfect security. But woe befall the animal which should chance to fall into one! as in a moment it would be attacked by myriads intent upon vengeance.

To give some idea of their numbers, in St. Helena, where they were accidentally introduced, the greatest damage was the result. Jamestown was literally devastated by them; the cathedral was destroyed, few books of the public library escaped, and everything in the town was more or less injured. The government stores, though packed in tight tin cans, were entered, and thousands of pounds destroyed. How they gained entrance into these cans was long a mystery; but finally it was found that the moisture on their feet as they walked, had corroded the tin so that it had rusted through, leaving small openings. These insects work out of sight; hollowing out the legs of tables and timbers of all kinds; and large supports, which had been supposed to be solid, have been found to be simple shells.

Their homes are a maze of tunnels, among which various apartments are prepared for the young; and in the centre of all is always found a small room which contains the queen-ant, who is watched and attended by the ants of different grades with the greatest solicitude. Some years ago some American gentlemen were lunching in the City of Mexico when a dessert was served which looked like currants, but was found to be ants swollen with honey. Later they learned that these remarkable little creatures were veritable bottles, which had been hung by ants upon the walls of a subterranean home as a winter supply of food, to be taken down and used, or rather, the honey which they held, as occasion required.

In the far northern country of Nova Zembla the mountain fox, *Vulpes lagopus*, perhaps to escape the rigors of the Arctic winter, constructs its home underground, a maze impossible to follow. The naturalists of the *Vega* expedition, found the lanes and alleys leading to the rooms often crowded and packed with birds which had been caught by the little hunters and stored away for use.

Our common jumping-mouse, *Zapus*, is an interesting burrower, and when caught upon the surface it has been known to leap quite over a man's head. It has been found in the winter at the end of its burrow, coiled up in a ball of grass, apparently dead; but in reality in the strange condition of insensibility known as hibernation; a state into which many animals pass at the approach of winter to enable them to bridge over the cold season.

These are but a few instances taken from many, illustrating the boundless resources of nature, and showing that not only are the air and water the teeming homes of many forms, but the solid earth is bored and tunneled to give them sustenance and protection.

SEARCH-QUESTIONS IN GREEK HISTORY.

By Oscar Fay Adams.

V.

CONFLICTS WITH THE BARBARIANS.

81. What monarchy had its capital at Sardis?
82. What monarch subdued the Asiatic Greeks?
83. How did this affect cities of Asiatic Greece?
84. What noted Samian despot was crucified by a Persian satrap?
85. What was the result of the Ionic revolt?
86. What event shows the recognition by the European Greeks of a common political interest?
87. At what place near Athens did the Greeks defeat the Persian army?
88. What noted Athenian general laid siege to Paros merely to gratify private revenge?
89. Name the two leading citizens of Athens during the ten years following the battle mentioned in Question 87.
90. What Persian monarch beholding his troops on the banks of the Hellespont is said to have wept at the thought that in a hundred years none of them would be left alive?
91. At what mountain-pass were the Persians resisted by a Spartan king with a small force?
92. At what battle with the Persians was the fate of Greece practically determined?
93. What queen was distinguished for her bravery on this occasion?
94. At what place were the Persians under Mardonius defeated the next year by the Athenians and Spartans?
95. At what place did the Persian navy suffer disastrous defeat at the same time?
96. What Spartan commander plotted with Xerxes to betray Sparta to the Persians?
97. What Athenian leader was suspected of treasonable communication with him?
98. What famous Hellenic confederacy followed the Persian wars?
99. Through the agency of what noted Athenian was this established?
100. Where were the Persians finally defeated by the Athenian leader Cimon?

ANSWERS TO FEBRUARY SEARCH-QUESTIONS.

41. Theseus.
42. Codrus. An oracle having declared that the Dorians would conquer Athens if they spared his life he went in disguise to the Dorian camp, and provoking a quarrel with the soldiers was killed by them.
43. Archon, or Ruler.
44. The *Eupatridæ*, or nobles; the *Geomori*, or husbandmen, and the *Demiurgi*, or artisans.
45. Because it really ended the Attic monarchy and this period, 683 B. C., is the first trustworthy date in Greek history.
46. Draco.
47. Because the sacrilegious act of Megacles, one of their number, in putting to death the adherents of the rebel Cylon at the altar of Minerva, was supposed to have drawn down upon the city the anger of the gods.
48. Solon.
49. Persons remaining neutral on such occasions were declared dishonored and disfranchised.
50. Crœsus, king of Lydia.
51. Pisistratus.
52. Hipparchus.
53. Harmodius and Aristogiton.
54. The re-distribution of the people of Attica into ten tribes.
55. The number of its members was increased from 400 to 500, its sittings became constant and the scope of its action was enlarged.
56. By the Heliœa, an assembly of all the citizens above 30 years old.
57. Ostracism.
58. Upon an appointed day the citizens wrote upon a shell or tile the name of the person they wished to banish. If 6000 votes were recorded against any one he was expelled from the city within ten days. If a less number nothing further was done in the matter.
59. On condition that the Athenians should send earth and water to the king of Persia.
60. By reinstating Hippias as despot of Athens.



A YOUNG PRINCE OF COMMERCE.

By Selden R. Hopkins.

CHAPTER VI.

A TALK ABOUT BANKS.

BUT I thought Williston was a small city, Albert! I don't understand why the people should want a bank in so small a place. Small towns don't usually have banks, do they?"

Her questions were directed to Mr. Albert Vangrift, the newly-made bank president of Williston, and in the midst of an interesting conversation going on between himself and several younger and a few more elderly people in which all were deeply engaged. And who was it that asked this question? It was Albert's oldest sister, Tama, who had changed much from the little child she was when we last met her in that far-off Western city amid the thrilling scenes of sorrow and mourning.

Tama was pleasing in her manners, refined in her nature, graceful in appearance and, happily, possessed of a sunny and even disposition. She was "good-looking" rather than handsome, but she would never fail to attract attention from her quick intelligence and rather queen-like appearance. She was, in short, a charming girl, and one intended by nature for a leader among her associates.

The conversation from which we have caught a few words was taking place at the home of aunt Mary, where Albert had come to visit for a day or two with his sisters, Tama and Tossa, and his little brother Mitty.

This was his first visit to the family-circle since he had been honored by his townsmen with the important position of trust in Williston. He was relating to his happy listeners what had taken place since he last saw them, and how he had applied himself to business study that he might acceptably fill the position.

Tama's question as to the bank had not much sooner been asked than bright little Mitty, who had been quietly listening to all that had been said, and feeling himself quite competent to answer easy conundrums voluntered a respone:

"Why, of course, Tama, they need a bank in Williston if they can get one. Don't they get money out of a bank? And of course the people can have more money, can't they, Allie, if they have a bank there?" Then turning from Albert, to whom he had looked for an endorsement of the assertion, he again faced Tama and in an assuring tone continued: "Don't you know that banks make money and give it out to the people? That's what banks are for, isn't it, Allie?"

"O, you funny little fellow!" chimed in the musical voice of little Tossa, who, up to this time, had been a silent auditor, but to whom the conclusions of Mitty seemed quite unreasonable, "people can't get money out of a bank by just going in and asking for it, can they, Al? Do tell us please, Allie, what *are* banks for anyhow," she continued, "and tell us just what *you* are going to have to do with the one in Williston?"

Then the last little speaker carefully edged her seat still closer to the side of her big business brother and patted him gently on the cheek with her small rosy hand, as she caught a glimpse of the smile that lighted his face and twinkled in his large brown eyes.

"Well, now," said the young Bank President, "if Tama and Mitty-boy will listen, I'll try to tell Tossa 'what I know about banks.' You may all hear something that will be new to you and interesting too, for what I shall tell you was, I am

sure, very interesting to me the first time I was told, or learned by reading about it.

"In the first place I want to say something about the importance of banks to the people, especially to those engaged in business. You all understand how useful stores in the country towns are to farmers and mechanics who depend upon such places for their goods, their groceries, clothing, tools, medicines, machinery, and many other necessities. Any little person can see, at once, that stores are a great convenience, and that the people would hardly know how to get along without them. Now, banks serve quite as important a purpose to business people of a city as do stores to farmers and working people of the country. Banks perform for business people two kinds of service and both are important. One is furnishing a place of safety for money without expense to the owner, and paying it out upon order, being responsible for losses and mistakes if any occur; and the other is that of loaning money to those who want to borrow and can afford to pay for its use."

DEPOSITED BY

.....

IN THE

COMMERCIAL BANK

of Williston.

Williston.....18...

	DOLLARS	CENTS
Bills		
Checks		

Fig. 1. A DEPOSIT-SLIP.

"Wait a minute, Allie," interrupted Mitty. "What did you say about furnishing a place of safety for money? How is that?" The little questioner couldn't quite take possession of the idea.

"Well," answered Albert, "even a little boy can see that it isn't safe for people to carry large sums of money in their pockets, or keep it in their places of business. There would be a constant danger of losing it, or of having it stolen. Yet people who do business often require to have, where they can use it at any time, large amounts of money and this they can leave in the care of banks. For the safe keeping of money, then, these banks have built within them large and strong iron vaults and safes wherein the money is securely locked and barred, and watchmen are employed to guard these safes and vaults day and night. If, while a person's money is in the care of a banker, it is stolen the banker is held responsible and must make it up to the owner. The person who thus leaves money with a banker for safe keeping is called a 'depositor,' and a bank is often called also a 'depository.' To place money thus in a bank is termed 'depositing' it."

"And did you say, Albert, that the banks take care of people's money in that way and charge nothing for it? How can they afford to spend their time?" queried Tossa.

"Yes, Tossa; and yours is a very natural question. I will tell you. It is because while the money is in their hands for safe keeping they have the privilege of using it the same as though it were their own; that is, they may loan it out to persons who want to borrow and who will pay something for the use of it. What they make upon such loans well pays for their trouble and all the costs of taking care of the money."

"But suppose, Allie, after the bank has loaned out a man's money which was 'deposited,' as you call it, the man should come and want it — want it that very minute, you know — what would the bank do then? Would they go and get it back for him?" very earnestly inquired Mitty.

"Oh, they would just give him the amount he wanted out of some other person's money that happened to be in the vaults. It would make no difference with the depositor so long as he got the amount. And you must understand here that money when deposited in a bank loses its identity — that is, it all goes into the cash drawers, safes and vaults together as one large amount. Smith's money is mixed up with Brown's, and both are thown in with Dusenberry's. A depositor, as you see, is not at all likely to get the same money back that he puts in; but that is of no consequence."

"Can't you explain to us all, Allie, how people do when they go to put money into the bank?" suggested Tama, seeing that this point had been overlooked.

"O yes! that's what *I* was going to ask," said little Mitty.

"Very well," was the reply. "Suppose Tama had five hundred dollars and she wanted to put it into the Commercial Bank at Williston. She would go to the bank with the money and ask to see the cashier. To him she would say she desired to 'open an account' and state who she was, and who she could refer to as to her responsibility, etc. If the cashier was satisfied he would furnish her a small 'deposit-slip' upon which she would write her name and place the amount she wished to deposit. Then she would be introduced to the 'receiving teller' and at the same time be required to write her name in a large book called a 'signature-book,' in the style and manner she would adopt for signing her checks. The teller after receiving her money would give her a small leather-covered book called a 'depositor's pass-book,' in which would be written her name as depositor and the date and amount of her deposit."

"And what *is* a deposit-slip, Allie?" queried Tossa.

"It is a small sheet of paper, usually about three or four inches wide and from four to eight inches long, upon which is printed the name of the bank with blank-lines for the name of the depositor and the date, the words 'Bills' and 'Checks,' and opposite these words money-columns to write in the amounts of each, which make up the deposit; like this — I will show you one."

Taking a piece of paper Albert proceeds to make up a form for illustrating his explanation (*fig.* 1).

"Sometimes," he continued, "the words 'specie' or 'gold' also appear and would properly come between those of 'bills' and 'checks.' The largest space is left on the slip for the amounts following the word 'checks' because the depositor often has a large number of checks to deposit at one time; and, for the convenience of the teller, who receives the deposit, the amounts of the checks are put down separately. You see, now, Tossa," continuing the explanation, "after the words 'deposited by' Tama would write her name, then, on the line after 'Williston,' the date of the deposit. Now, if her deposit was in bills, that is, paper money, she would write the amount in the money column under 'dollars' and 'cents'; if she had checks she would set down the amount of each check separately and carefully, so that the amounts could be easily added together. After having the amounts written she would draw a line underneath and add them up, showing at the bottom the total amount of the deposit."

"And then, you say, Allie, Tama would get a book from the man with her name written in it showing how much money *she* had put in the bank?" asked Mitty.

"Yes, banks furnish their depositors with small pass-books, which usually are about four or four and a half inches wide by six or seven inches long, with the pages ruled for entering upon one side the deposits, and upon the other, the drafts or checks paid by the bank, and having printed upon the first page for the deposits the name of the bank and the words 'In account with,' following which upon the other page is a blank for writing the name of the depositor like this:" — and Albert very quickly produced a neat illustration (*fig.* 2).

Dr. THE COMMERCIAL BANK OF WILLISTON

IN ACCOUNT WITH

Tama Vangrift *Cr.*

Payable in Current Bank Notes.

Nov.	12	T		500	.	75	50	30	80				
	13	C		100	..	20	..	20	50				
	15	T	1	000	..	40	60	50	35				
						37	50	8 Vr.	Ret.	318	10		
						42	85		Bal.	1281	90		
			1	600	00					1600	00		
Nov.	15	Balance											

Fig. 2. A DEPOSITOR'S PASS-BOOK.

"Here," he said, holding up the piece of paper, "is a small representation of Tama's pass book

after it has been 'balanced' by the book-keeper at the bank and returned to her. I have imagined for the purpose of explanation," said Albert, "that Tama has made three deposits, that is on November 12 five hundred dollars, on the 13th one hundred and on the 15th one thousand, and then presuming that she gave eight checks which, together amount to three hundred and eighteen dollars and ten cents, she leaves her book at the bank to be, as the book-keepers say, 'balanced up.' By that is meant the amounts of the checks being entered on the right hand or 'credit' page of the book and added up; the difference between the two sides, called 'balance,' is put down, first with the amount of the checks, so as to make it agree with the other side, and then it is written upon the left hand, or debit page showing the amount she still has on deposit. The words '8 Vr. Ret.' means 'eight vouchers, or checks, returned,' and that is to say, at the time the pass-book is balanced and returned to its owner, the checks she has drawn and which the bank has paid are returned along with it."

No.....

To.....

.....

For.....

.....

Date.....

$.....

No..... *Williston*.....18.....

The Commercial Bank,

of Williston,

Pay to the order of.....

.....*Dollars.*

$

Fig. 3. A BANK-CHECK IN BLANK.

"But these checks you tell us about, Allie — where do they come from? How did the bank get them?" philosophically queried Mitty.

"Oh, I did not explain about the checks. They are the orders made by the depositor on the bank for the payment of money. Whether a depositor wishes to draw the money himself, or whether he wants some other person to get it, he must write an order upon the bank, requesting the payment, and these orders are called bank 'checks' or as the English spell it c-h-e-q-u-e-s. These bear the signature of the depositor and that signature must correspond to the writing in the signature-book. Checks are usually printed forms, furnished by the bank, and, for the convenience of depositors, are commonly furnished in the form of books with stubs at one end so as to be torn out and a memorandum retained in the book. I will make one that will explain better what I mean. Here it is (*fig.* 3):

"There," he continues, "that is a plain bank check. You see there are two parts. The dotted line represents the perforation which separates the stub on the left from the check on the right. A blank line after the words 'Pay to the order of' is for the name of the person who the depositor wishes to get the money, and then comes a blank line for writing in the amount to be drawn; this amount is also to be made in figures after the dollar sign at the bottom. Then comes the signature in the lower right-hand corner."

"Then the person who gets the check can go to the bank and get the money, I suppose," presumed Tossa.

"That depends," replied Albert; "he can get the money if he is known at the bank, but if he is not then he must be identified by some person who is acquainted with some officer of the bank and who can say that he *knows* him to be the person named in the check. Banks must *know* that they do not pay money to the wrong person. If it were not for that precaution, and a check was lost, the finder could go to the bank and get the money. You see the words '*order of*' in the check place a responsibility upon the bank to see and know that the rightful owner of a check gets the money."

"But the man who gets a check must not necessarily go to the bank himself and get the money, must he?" asked Tama. "He can turn the check over to some one else, can he not?"

"Yes, certainly, and that brings up an important feature about checks. If Tama should make a check payable to Mitty, Mitty could turn it over to me and I could transfer it to Tossa, and so it could keep going until some one at last put it into a bank as a deposit, or took it to the bank on which it was drawn and got it cashed. In passing from

one to another as checks usually do in the course of business, it is customary that they be 'endorsed' by each person through whose hands they pass. Thus when Mitty turned the check over to me he would endorse it, and in transferring it to Tossa I would endorse it. By such an endorsement I mean writing across the back: 'Pay to the order of Tossa Vangrift,' and then sign 'A. Vangrift.' That would make it necessary for Tossa to place her signature also across the back when she should part with it."

"Wait a minute, Allie," sang out Mitty, "please let me take that check and see if I can 'endorse' it. There," taking the piece of paper. "I am to write on the back here," turning it over, "'Pay to the order of,' and sign my name here —"

"Hold on there," interrupted Albert, "you have got it wrong side up — a very common mistake — business men often do the same thing — but turn it the other side up. You should always bear in mind that in writing on the back or across the face of business papers the *left-hand end*, looking at the face when right-side up, should be the *top* when turned over, or up, so as to write crosswise. It looks very awkward and unbusiness-like to see a note or check endorsed with the wrong end, which with the face towards you is the right-hand end, turned so as to be at the top when the paper is turned over (*fig.* 4)."

"Well, there," said Mitty, turning the supposed check over as directed by Albert, and writing across the back at the top the words, "Pay to the order of A. Vangrift," and signing his name underneath then holding it up, "how's that for an endorsement?"

"Good," replied Albert, "and I hope, young sir, you will always remember what you have learned here when you have endorsements to make on business papers."

"Now, tell me," asked Tama, "would the check be good if Mitty had simply written his name across the back without the other words? Would it then be paid at the bank, or must the words 'Pay to the order of' always be on?"

"That would do just as well so far as getting the money; but it is not probable that they would know at the bank whether or not that was Mitty's signature; so, whoever went to get the check cashed would be required to place his name there, and too, if that person was not known at the bank he would be required to have some one who was known identify, that is, introduce him. Such an endorsement is what is termed in business parlance an 'endorsement in blank.'"

[There are three common forms for endorsing bank checks: (1.) "endorsement in blank," where the endorser's name only is written; (2.) endorsement "to order" as shown in the illustration; and (3.) endorsement "for deposit." This last form of endorsement is made by writing or stamping with rubber plates or otherwise, the words, "For deposit to the credit of" and then attaching the signature. Some business firms, in endorsing in this manner, specify the bank in which the check is to be deposited as, "For deposit in the Commercial Bank to the credit of," etc. It is not essential that the name of the bank should be given.]

"You see from what I have told you," Albert continued to explain, "that in some respects bank-checks are really preferable to either paper money or gold. If they will get paper money or gold when presented at the bank they are just as good as either; then they may serve as a receipt, which many times is an important consideration. If you pay a person a check and he endorses his name upon it, it is good evidence that he got the money, and in courts of law it is often admitted as evidence of that kind. Then, besides that, if you receive a check payable to your order and you lose it, or have it stolen from you, you can stop payment to the finder or thief and recover the loss by getting the money or another check. Checks are used largely by many people in transmitting money by mail. They are, in fact, as you will learn, sometime, one of the most important and common forms of money known to the commercial world."

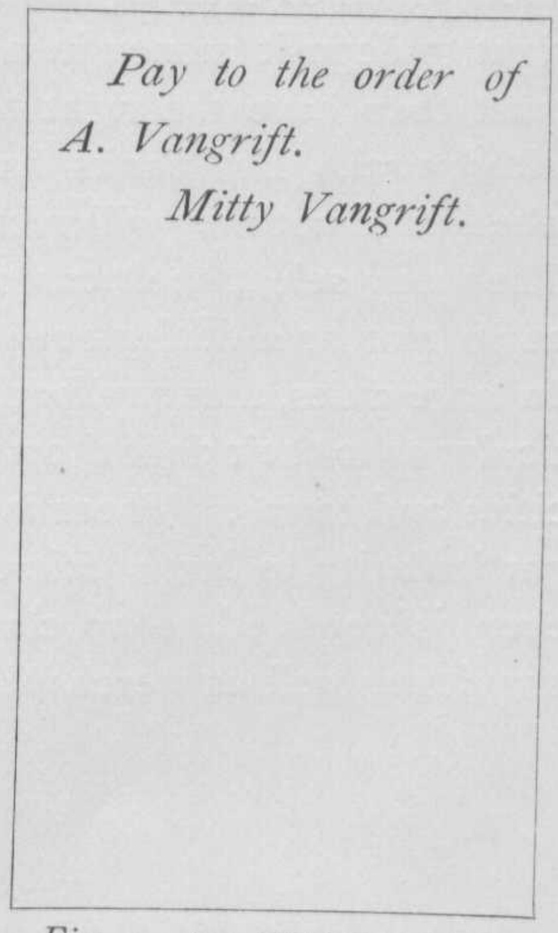


Fig. 4. AN ENDORSEMENT.

[Money is thought by many people to mean only bank-notes (paper money) and gold or other coin. In the commercial world, however, whatever is used in transacting business to serve the

purpose of bank-notes, greenbacks, gold and silver certificates, specie, etc., is termed "money." These other means or forms are checks ; either cashier's or depositor's drafts, and bills of exchange. It is estimated by careful authorities that not more than five or six per cent. of the money-transactions of the world are made with current funds, or bank-notes and specie; that is to say that ninety-four to ninety-five per cent. of the world's commercial exchange is effected by the use of commercial papers, as enumerated, which are made for the occasion and are destroyed as soon as the purpose for which they were made has been served. "Two to three hundred millions of dollars in money," says Mr. Walker in *Money, Trade and Banking*, "are made each day, doing the work of money for the day, and are destroyed at night."]

"Well, Allie, can any person who wishes make checks on a bank? or is it only business people, like merchants, who are allowed to do that?" thoughtfully inquired Tossa.

"I don't think I would ever have thought of that question," laughingly replied Albert, "but it's a proper one. The right to make checks is confined to no class of persons; but the law restricts the right to those only who have money in the bank upon which to draw against. Every person has a right to deposit money in a bank, and, of course, must then have the right to make checks for its withdrawal. But banks have a right also to say whether or not they will receive a person's money. They may select their customers, and may refuse any person as a dealer or depositor if they so wish. In large cities, they say, banks are much more particular as to their depositors than are those in small cities and towns. There is greater need for such particularity in large cities. The privilege, however, is confined to no class. Farmers and mechanics as well as merchants and millionaires may have bank-accounts. Mr. Waldo says he knows a boot-black in New York who keeps his bank-account and almost always has several hundred dollars on deposit. I presume there are many others whom he don't know."

"Well, who is it that says whether or not a person may be a depositor or not? Is it the teller as you call him, the one who takes the money?" wondered Mitty with much earnestness.

"I believe the president or cashier would be the proper persons to decide about that. In one case I know of that came into court, the judge in his opinion said that the cashier had a right to decide such a question."*

"But you are to be president of the bank over in Williston aren't you, Allie, and would you"—

"Gentleman at the door wants to see Mr. Vangrift," interrupted aunt Mary. "That means you, Allie, I suppose."

Albert arose and excusing himself went into the front hall to meet the caller. As he approached, the gentleman handed him a note, opening which he read:

"MY DEAR MR. VANGRIFT:

If it is possible I wish you would return to Williston immediately. I am going to New York on important business and from there to Philadelphia. Would be glad to have you accompany me, and believe it will be to your advantage to do so. JAMES WALDO."

"Mr. Waldo said if you could not return with me," remarked the gentleman in waiting, as soon as he saw Albert had finished reading, "he would like me to bring your reply."

"I shall go with you," replied Albert. "It will take me but a few moments to get ready. Do you return immediately?"

"I am waiting only for you or your answer."

* Thatcher v. Bank of State of New York 5 Sanford p. 130.

(TO BE CONTINUED.)

I THINK it's very curious,"
Said little Tommy Knox,
"My teacher always says that sand
Is made of ground-up rocks;
And when I ask what makes the rocks,
She says, 'Why, don't you see?
They're made of grains of sand packed close,
As close as close can be!'"

SOME SUCCESSFUL WOMEN

By Sarah K. Bolton.

VI.

MARGARET.

NEW ORLEANS, with its orange-trees fragrant with white blossoms and golden fruit, with its verandaed homes overgrown with roses, with its house-lawns bordered with sweet blue violets, is a city long to be remembered by a stranger.

I was glad to see all this; I was glad to touch the warm Southern hand with its genuine hospitality; but I was especially glad to see — remembering what it represented to New Orleans — the marble statue of "Margaret." It stands in a large open square, and is the first, I believe, erected to a woman in this country. "Margaret" is represented sitting in a rustic chair, dressed in her usual costume — a plain skirt and loose sack, with a simple shawl thrown over her shoulders; her arm encircles a pretty orphan child.

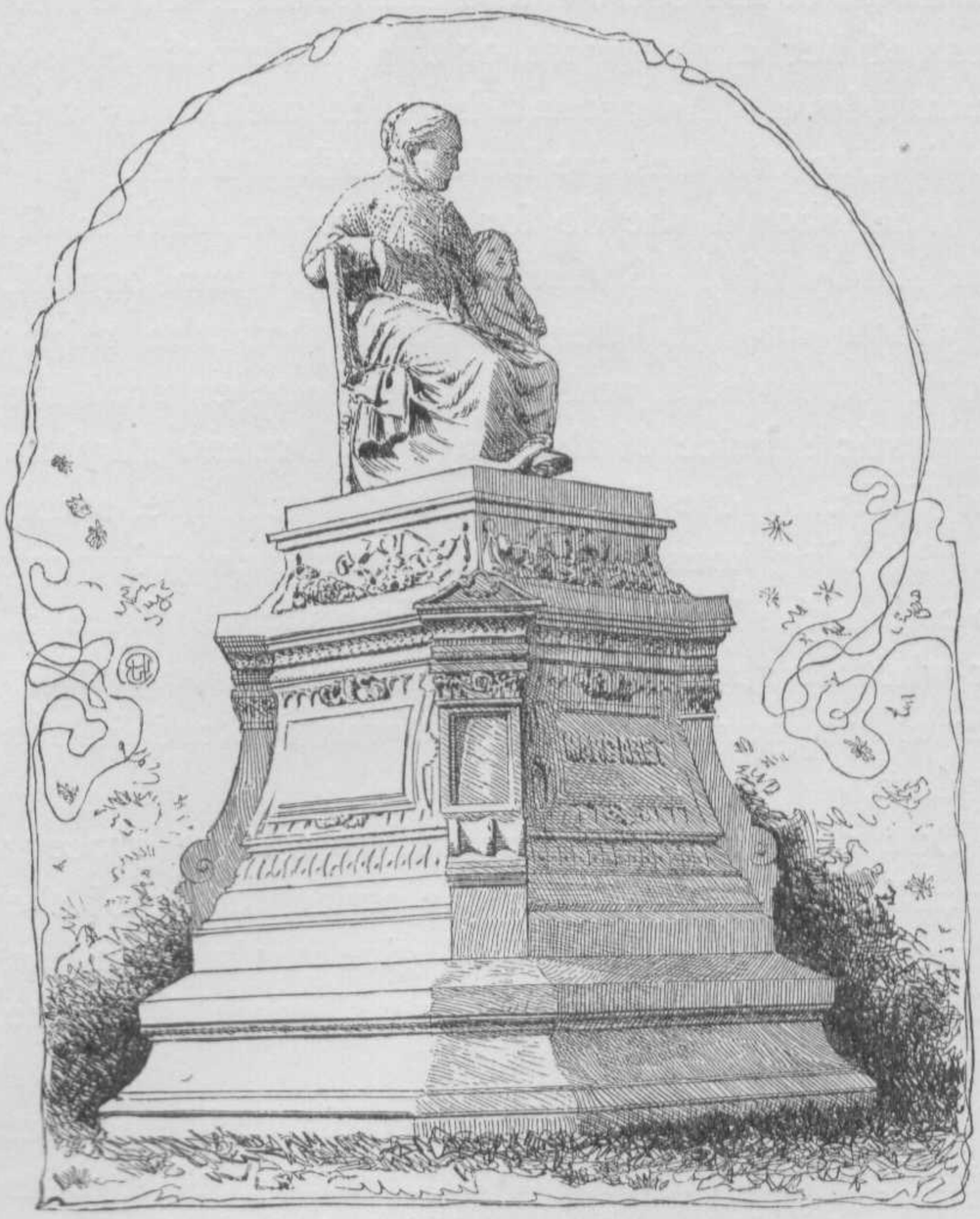
The face of the woman is very plain but very kindly. There is no indication that "Margaret" was a woman of great power or of great fame; the statue is simply the thank-offering of a whole city for a beautiful, unselfish life lived in its midst. Many men and women have possessed millions — and have spent all upon themselves; Margaret spent her small riches for others. Thousands about her had unlimited opportunities for education; "Margaret" could scarcely write her own name. Yet to her, of all our countrywomen, stands the beautiful memorial.

Who was this "Margaret" so honored above others?

More than a half-century ago, there came to Baltimore, among the Irish emigrants, a young man and his wife, William and Margaret Gaffney, to seek their fortunes in the New World. They were poor of course, but they loved each other, and were happy to struggle together. By and by a little daughter came into their home, whom they naturally called Margaret, after the mother.

They were not long to enjoy the little daughter or she to know their love, for both parents died of yellow fever, leaving the helpless child to the tender mercies of the world at large. Fortunately, some friendly people, Mrs. Richards and her husband, had crossed from Wales on the same steamer as the Gaffneys, and though Mr. Richards had just died also of yellow fever, the stricken wife took the wee child into her own home.

The girl grew to womanhood in this shelter; and



THE STATUE TO "MARGARET OF NEW ORLEANS."

while she knew the privations and wearinesses of poverty and lowly labor, she knew also from the good teachings of Mrs. Richards, that the best of all things in the world is loveliness and truth of character, and this precious seed was to bear fruit in later years.

In due time Margaret was married, to young Charles Haughery. They commenced life together, as did her parents, with empty purses and full hearts. But shadows soon began to steal over

the little home. The husband's health failed, and they decided to move from Baltimore to New Orleans. But this change of climate did no good. Advised by his physician that sea-air might prove beneficial, he said good-by to his young wife and baby-child, and sailed for Ireland. The good-by proved to be the final farewell, for he died soon after reaching his destination.

Though this loss was hard for the wife to bear, a second loss followed, the hardest a woman can ever know — the loss of her only child — and Margaret was alone again, poor, yet warm-hearted, and loving all children tenderly — the more, it may be, that her own arms were empty.

Did she sink in despair? No. She could feel the hand that was leading her, even in the densest darkness of her sorrow, and she never lost the fullness of her divine trust, or the tenderness of her human love. As ground is made mellow by harrowing, so ofttimes are hearts made fruitful.

What should she do for self-support, and to fill her lonely life? She who was an orphan herself, a widow and childless, wished that she might work for orphans, and to this end she entered the domestic service of the Poydras Orphan Asylum for Girls. Here she toiled early and late, sometimes doing housework, and sometimes going out to collect food and money. How she was dressed, or whether she had ordinary comforts, seemed to her of no moment. Her life was centred in the asylum.

One day when she appealed to a large grocery establishment for aid for the orphans, one of the firm laughingly said, "We'll give you all you can pile on a wheelbarrow, if you will wheel it to the asylum yourself."

Margaret promptly agreed to this, and in a short time returned with her wheelbarrow, filled it to its utmost capacity, and trundled it home along the sidewalk. The young man surprised at her courage, and admiring her noble spirit, insisted on wheeling it for her, but Margaret politely refused, saying she would cheerfully wheel a barrow-load every day for the orphans if it were given to her.

Sister Regis, the Superior of the Sisters of Charity, much beloved for her self-sacrificing life, in time became Margaret's warmest friend and adviser. When it was necessary to erect a new Orphan Asylum, a large and commodious one was built on Camp street (in front of which Margaret's monument now stands), and in ten years Margaret and Sister Regis, working together, had freed it from debt. For seventeen years Margaret had lived in the asylum, managing the large dairy, and doing any and every kind of work that would aid fatherless and motherless children.

In 1852, she decided to open an independent dairy in the upper part of the city; in this enterprise she soon demonstrated her financial ability. Never wasting a cent upon her own wants — indeed she never seemed to have any — she scrupulously devoted all profits to her beloved work. Everybody knew Margaret's milk-wagon, and her kind plain face as she went from customer to customer.

Then she added the old D'Aquin bakery to her business. The former proprietor, who had always been generous to the orphans, had become financially crippled, and borrowing from Margaret, her creditor at last was obliged to take the bakery into her own business. That she succeeded in "making money" out of the new branch, was due to economy, sterling integrity, and to the fact that everybody knew and respected and relied upon her and liked to buy of her.

She opened her bakery in 1860. Says George W. Cable, who knew her: "But long before that, as well as long and ever after it, any man might say to you as a strange woman passed in a dingy milk-cart — or bread-cart in later years — sitting alone, and driving the slow, well-fed horse, 'There goes Margaret.' 'Margaret who?' 'Margaret, the Orphan's Friend.' I suppose we should have forgotten her married name entirely, had not the invoices of her large establishment kept it before us. 'Go to Margaret's' was the word when a country order called for anything that could be bought of her; but the invoice would read:

New Orleans, March 15, 1875.

MESSRS. BLACK, WHITE & CO.

To MARGARET'S BAKERY (Margaret Haughery) *Dr.*

2 Bbls. Soda Crackers, etc.		

"And what had she done, what was she doing, to make her so famous? Nothing but give, give, give, give to the orphan boy and the orphan girl, Catholic, Protestant, Hebrew, anything. Yes, one

thing more; she gave and she loved. But that was all. Never a bid for attention. Never a high seat in any assembly. Never a place among the proud or the gay. No pomp, no luxury, no effort to smarten up intellectually and take a tardy place in the aristocracy of brains. Nothing for herself. Riches and fame might spoil Solomon; they did not spoil Margaret.

"Of education she had almost nothing; of beauty as little — to the outward eye; accomplishments, none; exterior graces, none; aggressive ambition, the disposition to scheme or strive for station or preference, none; sparkling gayety, exuberant mirth, none, more than you or I; money, some, a little, a trifle; financial sagacity, a fair share, but nothing extraordinary; frugality? yes, frugality — as to herself. What else? religion? Yes, yes! pure, sweet, gentle, upbubbling, overflowing, plentiful, genuine, deep, and high; a faith proving itself incessantly in works, and a modesty and unconsciousness that made her beneficence as silent as a stream underground. Hers was one of those very rare natures, whose happiness is found in blessing, not in being blessed.

"The whole town honored her. The presidents of banks and insurance companies, of the Chamber of Commerce, the Produce Exchange, the Cotton Exchange, none of them commanded the humble regard, the quick deference, from one merchant or a dozen, that was given to Margaret. They called her by her baptismal name — as they do queens and saints — because they loved her, and then loved her the more because she went by that name; the name of that sweet meadow flower which Wordsworth calls 'the poet's darling.'"

While the Civil War lasted her business was somewhat checked, but never her charity.

During the war, the Fourth Louisiana Regiment was captured at Shiloh and brought to New Orleans, and imprisoned at the police station, Algiers, across the river. The news of their arrival sped through the city, exciting the sympathies of thousands of women, who immediately sent presents of clothing, food and niceties. Margaret, true to her instincts and principles, though having no son or relative in the war, loaded a wagon with bread and crackers, and accompanied by two negro men, appeared before the gateway of the prison, her two men bearing immense baskets filled with bread, on their heads.

The sentry on seeing her approach, slightly depressed his musket and commanded, "Halt!"

Margaret replied, "What for?"

The sentry again commanded, "Halt!"

Margaret advancing, said, "What for?"

Thrice the challenge was repeated and questioning answer given. Then she, with remarkable quickness for a woman weighing one hundred and eighty pounds, jumped to one side the musket, seized the boy in blue by both shoulders, and lifting him away, marched in, followed by her attendants. The surprised soldier, overcome with aston-



MARGARET.

(From the photograph by Souby, 113 Canal St., New Orleans.)

ishment, could but join in the shout of his comrade sentinels, who had witnessed the scene.

During the Fourteenth of September fight a young man, a Protestant, lost his leg; Margaret tried to obtain for him a situation at a toll-gate, but failing in this, gave him one hundred and fifty dollars to buy a leg; then set him up in business as a newspaper-seller, and supplied his family with bread during her life. This young man was a pattern-maker in a foundry; but his wound incapacitated him for his position.

In the inundations to which New Orleans is subject from the overflow of the Mississippi River, Margaret could be seen daily in a large boat, standing in the midst of great piles of bread, a

colored man paddling her through the river-streets, as she dispensed her loaves to the half-starved families.

She never asked what their race or creed. All alike shared her bounty. Her life-motto: "God has been so good to me, I must be good to all."

The three largest Homes for Children in New Orleans are almost entirely the work of Margaret, as well as the Home for the Aged and Infirm. Being asked once, "Why don't you buy a fine dress?" she replied, "There is too much suffering in this world."

For forty-six years Margaret had carried on these labors of love in New Orleans, making her money with great industry and sagacity, to spend it for the poor and afflicted. But the time drew near for her to leave her work to other hands. Sickness came. The women of wealth and fashion made the sick bed as easy to lie upon as possible. To a lady who said, "I am sorry to see you ill," Margaret answered, "Oh! no, the Lord sometimes has to lay his finger on me to let me know I am mortal and don't belong to myself — but to Him."

On February 9, 1882, the end came of this noble life. And then thousands, the poor and the rich, the City Government and New Orleans' merchants and bankers, gathered at the funeral to do Margaret honor. The services were conducted by the Archbishop of the Diocese. Then followed in carriages, after the pall-bearers as the beloved Margaret was borne to the grave, the children of eleven orphan asylums, white and black, Protestant and Catholic. Many of the fire companies of the city were present, especially "Mississippi Number Two," of which she was an honorary member. Great crowds lined the streets, and all men took off their hats reverently, as the procession moved by.

The following Sabbath, sermons upon Margaret's character and life were preached from many pulpits; upon the woman so poor and plain that she never wore a silk dress or a kid glove; so rich that she gave in charities six hundred thousand dollars, the fruit of her own labors.

"St. Margaret" as she is often called, lived her life in grand heights and breadths. She brought every man and woman who knew her up on higher levels, too, for a moment's glimpse at least. Her monument, built by the city she blessed, stands now, in place of her, a constant reminder that one's own children are not the only children in the world; that one's home is not the only home into which we are commanded to carry sunshine and love; that though one be poor, there is work for others to do; that though one be ignorant, one may yet carry heaven's own light far and near.



"THE VERY SWEETEST."

AN OPEN SECRET.

By M. E. B.

ANSWER my riddle, my darling, my dear:
What are the four sweetest things in the year?

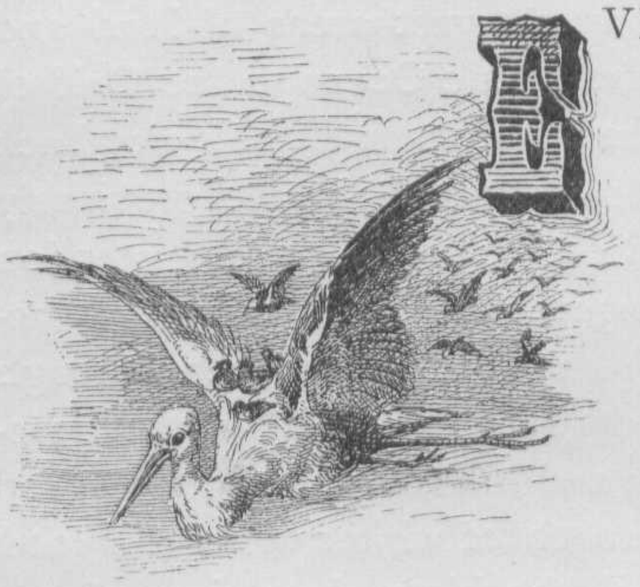
"No need of guessing, for every one knows:
Summer; a girl; a bird; and a rose!

WONDER-WINGS, MULLINGONGS, COLOSSI, AND OTHERS.

By C. F. Holder.

VI.

HOW ANIMALS PROTECT THEMSELVES.



A NOVEL FERRY-BOAT.

EVEN upon a glance at the so-called lower orders of animal life it is evident that the various forms must prey upon one another to live, and while certain animals are furnished with teeth, claws, and powerful muscles and every faculty for the capture of others, even the most helpless creature seems to be provided with some means of protection or defence; and that these are often of the most wonderful nature every naturalist knows.

As a rule, the lower the animal in the scale of life the more elaborate is the defence; even the extremely simple forms, as the jelly-fish and the physalia, being provided with a protection that is remarkably effective.

The physalia, or Portuguese man-of-war, is one of the most beautiful of marine objects — a veritable fairy-ship floating about upon the ocean; a bubble of satin, bearing upon its upper surface a silvery pink-tipped sail which can be raised and lowered at will. No more tempting dainty could be placed before a hungry gull or sea-bird; but never have I heard of such an indulgence. The birds and undoubtedly many marine animals are well aware that the man-of-war, which sails so gayly in the breeze, has a defence of so virulent a nature that it can be touched only with great risk. I have seen a physalia attacked but once, and this was by a young turtle, one unversed in the study of zoölogy, or it would never have made the attempt to dine on so dangerous a creature. I discovered it floating on the surface, and though powerful enough to carry its coveted dinner far under water it had been thoroughly overcome.

Looking under water the beautiful Portuguese man-of-war will be seen to have a dense, purple-hued train of tentacles, often seventy-five feet in length, while the float itself is not as large as the closed hand. Under the glass this richly-hued mass is seen to be covered with little pores, or cells; and if we look very closely, each cell will be found charged with a minute javelin twisted and coiled; in fact, a minute bomb ready to be hurled. Every portion of the tentacles is armed with these javelins, and the moment a foreign object comes in contact with them they are discharged; in other words, each cell turns inside out, and the little lasso-like weapon is propelled at the enemy, the combined effect of myriads often producing a serious shock. Every bather on the New England coast has felt a similar discharge when coming in contact with the so-called sea-nettle — a species of Medusa commonly known as sun-fish, jelly-fish and by other names.

All these jelly-like forms are protected in this way, and undoubtedly the various marine animals find out the virulence of their stings and give them a wide berth, as so few are known to prey upon them. In the summer, in the Gulf of Maine, the lump-fish has been observed taking a bite out of the centre of the disk, and this is also true of the dog-fish.

Many insects rely upon their appearance alone to terrify enemies. Thus some of the stag-beetles present a terrible array of spines upon their backs. These spines cannot be used in any way by the beetles which are harmless little creatures; but the ponderous bodies and sharp spines are sufficient to intimidate the boldest insectivorous bird.

The sword of the sword-fish, the serrated weapon of the saw-fish, the sharp bill of the gar, and the whip-like tail of the rays with the serrated bony stings, are all protective weapons that few animals care to encounter more than once. These creatures rarely flee from their enemies, relying upon

their various armaments, and are, comparatively speaking, slow swimmers.

On the other hand, we find many animals, which have no special means of defence, supplied with remarkable means of escape. The herrings, mullet, and flying-fish are examples of particularly defenceless forms which are endowed with great powers of speed.

Among the higher animals the kangaroos present a remarkable instance; one small individual was so wonderful a leaper as to have bounded over a horse and rider in its efforts to escape. This power of leaping and bounding away is the only means of protection possessed by this special group of kangaroos. Though at close quarters the kangaroo is a formidable adversary, with its long sharp claws, when followed they invariably attempt to escape by using their powerful hind legs to force them through the air and over the bushes at incredible speed.

In this country we have jumping-rats of several kinds, which leap ten feet or more; requiring a very sharp pair of eyes to follow them. Under this head, referring to the method of escape, come the grasshoppers and all leaping insects. Their limbs are enlarged to form powerful jumping organs, with which they hurl themselves into the air regardless of direction, thus escaping even the quick-motioned birds in pursuit.

Jack Frost, the advance guard of winter, warns our feathered friends that cold weather is approaching, and in their actions at this time is seen one of the most wonderful of all instinctive methods of protection. Throughout the summer days we have been accustomed to the hum of the insect life that has thronged the woods and vales; but the first frost that signals the approach of winter is a warning of their near departure. They disappear. Some crawl into the ground and bury themselves far beneath the surface; every old root or tree being an asylum for vast numbers of forms fleeing from the winter cold. By far the greater number are doomed to destruction, and in their disappearance we see how closely all nature is bound together, as this removal of insect life, if no other provision were made, would have a disastrous effect upon the majority of the three billion birds which are supposed to populate our continent, many of whom depend upon insect food, and are threatened with starvation. The grain-eaters also have their supply cut off, as their food no longer stands in the field protected by the helpless scarecrow, but has been harvested by the farmer. So we have an army of birds utterly deprived of food. To whom can they look for protection?

Such a great problem would not be neglected by nature, and we find that birds are enabled to surmount the difficulty. This provision is "instinct;" and how wonderful it is we can only realize when we remember that it enables small and delicate birds to traverse vast areas of land and water, often from the Arctic Ocean to the Gulf of Mexico twice a year, and to find their way back to the very tree or spot that they have previously nested in. Migration, then, is their protection from cold and hunger, and exactly how it is accomplished is still somewhat of a mystery, though many persons are engaged in studying the question in this country and in Europe.

At the first approach of winter when the food supply begins to fail, the birds show signs of unusual action. The swallows congregate in certain trees for days and sometimes weeks, as if they were holding a meeting of the Bird Geographical Society to determine upon the best route to take. Day after day these flocks are seen; then finally they will be missed, and miles away to the south they may be traced, wending their way to the lands where summer is present.

Probably comparatively few have seen flocks of migrating birds, and this is perhaps due to the fact that the journeys are made at night. This was shown in a peculiar way some time ago near one of our large cities. An astronomer was engaged in making some difficult observations, and one night he was annoyed by what appeared to be a succession of blurs or specks passing over the glass. A careful examination of the instrument revealed that it was in good condition, and it was evident that the trouble was in the air, and after close scrutiny the black specks were found to be small birds flying swiftly at a height of over two miles above the surface of the earth.

Since then it has been ascertained that most of the migrations are undertaken at night, the bird tragedies that occur at lighthouses telling the story. Hardly a night in the spring and fall months of the year but numbers of birds of all kinds are lured to their destruction by the vivid

light from the beacons that are protection and warning to human travellers. Mr. William Brewster, a Boston naturalist in charge of the bird-department in the Agassiz Museum, spent nearly seven weeks making night observations at Point Lepreaux lighthouse, New Brunswick, on the west shore of the Bay of Fundy, and the results shed a vast amount of light upon the subject, though they tell a sad story of the mishaps of our feathered friends during their journeys. Mr. Brewster says in a communication to the Nuttall Club:



A WONDERFUL LEAPER.

The first "rush" occurred on the night of September 1, and for the two weeks following, the feathered tide flowed swiftly and more or less steadily, marking its course through the star-lit heavens by the incessant chirping of its passing legions, in thick weather surging confusedly about the light, wrecking many a bird-life against the fatal shaft, and at daybreak leaving hundreds of tired little travellers stranded in the scanty covers of the Point.

This was a remarkable exhibition, but a few nights later Mr. Brewster observed from the Light a scene that few have witnessed — a veritable rain of birds which he thus describes:

At the height of the *mêlée* the scene was interesting and impressive beyond almost anything that I ever witnessed. Above, the inky black sky; on all sides, dense wreaths of fog scudding swiftly past and completely enveloping the sea which moaned dismally at the base of the cliffs below; about the top of the tower, a belt of light projected some thirty yards into the mist by the powerful reflectors; and in this belt swarms of birds circling, floating, soaring, now advancing, next retreating, but never quite able, as it seemed, to throw off the spell of the fatal lantern. Their rapidly vibrating wings made a haze about their forms which in the strong light looked semi-transparent. At a distance all appeared of a pale, silvery gray color, nearer of a rich yellow. They reminded me by turns of meteors, gigantic moths, swallows with sunlight streaming through their wings. I could not watch them for any length of time without becoming dizzy and bewildered. When the wind blew strongly they circled around to leeward, breasting it in a dense throng, which drifted backward and forward, up and down, like a swarm of gnats dancing in the sunshine. Dozens were continually leaving this throng and skimming toward the lantern. As they approached they invariably soared upward, and those which started on a level with the platform usually passed above the roof. Others sheered off at the last moment, and shot by with arrow-like swiftness, while more rarely one would stop abruptly, and poising a few feet from the glass, inspect the lighted space within. Often, for a minute or more, not a bird would strike. Then, as if seized by a panic, they would come against the glass so rapidly and in such numbers that the sound of their blows resembled the pattering of hail. Many struck the tin roof above

the light, others the iron railing which enclosed the platform, while still others pelted me on the back, arms, and legs, and one actually became hopelessly entangled in my beard.

Why the birds should select the night for their migrations would seem difficult to understand, especially as if taking land-marks as their guide they could not see them as well as during the day. But during the daytime they must feed, and the presence of human enemies may prevent their passage in large conspicuous bodies; so that, as a rule, the onward march is made after nightfall.

During the fall a vast army of birds is moving South, impelled by this wonderful instinct, and undoubtedly guided by means of their habits of observation. Those who have made an ascension in a balloon to a lofty height have noticed how plainly the great natural features of the country are seen even at night. The valleys, the mountain-chains and coast-lines are easily distinguished, and the bird rivers, as they may be termed, follow these guides.

At one time for six weeks I watched the flight of the sand-hill cranes in Southern California in their Northern migration; thousands passing overhead daily, sometimes almost within rifle-shot, and again two miles above the sea, following the Sierra Madre range. Each successive flock took the same course midway between the summit and base of the range.

At this same time thirty miles west immense throngs of ducks and geese were following up the coast-line, finding there numerous swamps and marshes in which to rest and feed.

It is evident that in fleeing from the cold many dangers are experienced, especially by the birds which follow the coast-lines. Off-shore gales often carry them far out to sea, and they are lost. Not a ship coming into port from a European cruise but can report the appearance far out from land of one or more birds, so wearied with their long flight over the waste of water that they did not exhibit the slightest fear. Sometimes it is an eagle or a large hawk, but, as a rule, small shore-birds; and the extent to which they are blown from the land is well shown in the Bahama Islands, where every spring and fall numbers of migrating birds are observed.

At Garden Key, a coral island, on the extreme outer point of the United States, in the Gulf of Mexico, I have seen many of our common birds, as the cuckoo and others. They would appear suddenly, and sometimes the trees would be filled with them, usually after a heavy norther, showing that the little creatures must have flown entirely across the Gulf of Mexico, probably from Texas or some of the Gulf States, without a rest — a wonderful evidence of their power of endurance.

Some of the smallest birds undertake the most extended flights. Thus a little warbler (*Dendroeca*) ventures in summer to the edge of the Arctic Sea, returning far South to escape the extremes of winter. Our common robins are also found there, and the regularity with which they find their way back to the orchards of their choice is remarkable. In one instance that I know of the robin returned on several successive years within a few hours of the time, and not only built in the same tree, but occupied the very limb and corner, piling a new nest upon the old until four were seen.

A gentleman who has spent many years upon the shores of the Mediterranean, informed me that he had often seen birds reach the European shore, having made the flight from Africa, so fatigued that they dropped upon the beach utterly exhausted, and could be picked up.

These migrations are taken advantage of by the bird-fanciers who frequent localities where quail are known to land. As the birds alight in flocks utterly unable to move, a net is lowered down upon them, and they are secured.

Certain birds escape the rigors of winter, and succeed, according to a European naturalist, in crossing the Mediterranean at the expense of others. A stork was the victim in the instance observed, the little birds clustering about and finally alighting upon its back, so obtaining a ride across the sea. I, myself, have seen a gull standing upon the back of a pelican while the latter was swimming about; but that a bird should board a flying stork and take free passage to Africa is certainly remarkable.

The lanes of bird migration in Europe are similar to those in this country, and on the island of Heligoland, which lies in the path of this great river of birds, thousands of feathered travellers of all kinds are often seen in the spring and fall, and at night clouds of them congregate about the Light, of such density as to nearly obscure the rays.

Among the animals which do not migrate we find some curious methods of protection. Thus the ptarmigan and several other animals change their color with the seasons; in the summer having a dark plumage or fur, and when winter comes, and the ground is covered with snow, assuming a coat of the same pure white, making them equally inconspicuous to friend or foe.

Some years ago I received a number of crabs intended for an aquarium, and before placing them in their prison I took a stiff brush and rejuvenated them, so to speak, by removing all the sea-weed with which they were thickly covered, and in this condition dropped them into the tank, which was evidently not to their taste; being, with its four glass sides, much too bright and cheerful, and rendering them entirely too conspicuous. While watching their deliberate yet frantic efforts, for they were slow movers, to effect concealment, I became witness to a very ingenious and effective mode of protection. The crabs, one and all, crawled in the direction of a pile of moss-covered rock, and lodged themselves in the various nooks and corners; but still with their polished backs they presented a decided contrast to the rocks. While I watched them one large crab reached its long biting claw out, and with great deliberation severed a bit of sea-weed from the rocks and conveyed it to its mouth. It was evident then, I thought, that they had not lost their appetites by being subjected to such unusual treatment; but in a moment more I found that the morsel was not intended as food, for it was conveyed by an overhand or claw-movement from the mouth to the back, pressed upon it and curiously enough, remaining there as if growing. Another piece of alga was then taken and the same operation was repeated, and I now saw that all the crabs were diligently at work in the same way; in short, were forming a plantation of sea-weed upon their backs, rapidly creating thus a resemblance between themselves and the moss-covered rocks among which they were hiding. In a remarkably short space of time the resemblance was complete, and they were effectually concealed, and few hungry fishes would have suspected that beneath these waving branches rested a good breakfast.

The severed portion of the weed was undoubtedly pressed to the mouth to receive some gelatinous substance that effectually cemented the branch to the back, where it grew and flourished.

On many Japanese articles is figured a little turtle which finds protection in a similar manner. It was once my good fortune to see one of these little oddities. It was called by its owner a hairy turtle, the hair being a long graceful train of dark-green sea-weed that almost completely concealed it; giving it a very peculiar appearance when swimming (which it did with difficulty) and serving as a perfect disguise or protection.

Quite a number of animals seek to mislead their enemies in this way. One, a large univalve, selects shells and fastens them to its own so firmly that they become a part of it. Various worms in a like manner decorate or embellish their tubes; working in bits of shell and weed that afford them a thorough protection.

The common star-fish of the Eastern shore, and particularly the echinus, has a habit of piling bits of shell upon its back or spines, probably as a concealment; yet the little creatures are extremely careful to prevent the advance of an enemy, and if a bit of foreign matter becomes lodged on the spines it is very quickly removed. How this is possible when the echinus is without hands is somewhat of a mystery; but if we apply a powerful glass to the surface of the animal we shall see numbers of pincer-like bodies, called pedicellariæ, among the spines. They are really hands, or three-jawed pincers mounted on short stems, and their purpose is to free the surface of the echinus of any disagreeable intruder. Such an object is seized by the little calcareous jaws, passed down from one to the other and finally dropped off.

The efforts of animals in protecting each other would form an interesting chapter. An injured gull has been seen borne off by two comrades out of reach of a gunner; the two friends each taking their wounded companion by the tip of the wing, and so flying away. A hawk has been known to dart at a boy's kite and tear it in pieces in mid-air, thinking it some enemy that menaced its mate or young.

And so throughout all nature we find that while the various animals are destined to prey one upon another, they have been provided with means of protection and defence generally sufficient to equalize the struggle for existence.

SEARCH-QUESTIONS IN GREEK HISTORY.

By Oscar Fay Adams.

VI.

FROM PERICLES TO THE SICILIAN WAR.

101. By what other name is the Revolt of the Helots of Sparta sometimes called?

102. Whose assistance did the Spartans seek on this occasion?

103. What event destroyed the influence of Cimon and prepared the way for the advancement of Pericles?

104. What famous walls were built by the advice of Pericles?

105. In what year was the famous Thirty Years' Truce concluded, and between whom?

106. What statesman who flourished in Athens at this period had the same name as a famous later historian?

107. Mention a noted building erected upon the Acropolis in the time of Pericles.

108. Name one of the principal causes of the discontent of the members of the Confederacy of Delos.

109. What independent island power was conquered by Athens during this period?

110. What event occurring about 435 B. C. plunged Greece into general war?

111. What sculptor, the friend of Pericles, died in prison?

112. What very noted Athenian woman flourished in this period?

113. Name the most memorable siege in Grecian history.

114. What noted Athenian leader after Pericles is said to have been a leather seller or tanner?

115. What famous blockade was conducted by Demosthenes?

116. What talented Athenian orator and leader of fashion was accused of profaning the Eleusinian Mysteries?

117. On what occasion did he twice receive an olive crown?

118. When and by whom was the Peace of Nicias concluded and what was its duration?

119. What people defeated the Athenians in a naval engagement in Sicily?

120. What great Athenian general was captured by them?

ANSWERS TO MARCH SEARCH-QUESTIONS.

61. Excess of population and civil tumults and dissensions.

62. No, they were independent. Filial affection and a common religion constituted the only ties.

63. On the eastern shores of the Ægean Sea.

64. The northern portion was colonized by the Æolians, the centre by the Ionians and the southern by the Dorians.

65. Miletus, and, later, Ephesus.

66. Syracuse and Agrigentum.

67. Agrigentum, at one time ruled by the proverbially cruel Phalaris.

68. The Carthaginian.

69. The southern part of Italy was so called from the number and importance of the Greek colonies there.

70. The war between Sybaris and Croton which resulted in the destruction of the former.

71. Sybaris.

72. Locri.

73. Tarentum.

74. Massalia, the modern Marseilles.

75. Cyrene.

76. Between Corinth and Corcyra, now called Corfu.

77. Sinope.

78. Miletus.

79. Phocæa.

80. From the Phœnicians.

C. Y. F. R. U.

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WIDE AWAKE

VOLUME Y



BOSTON
D LOTHROP COMPANY
FRANKLIN AND HAWLEY STREETS



A YOUNG PRINCE OF COMMERCE.

By Selden R. Hopkins.

CHAPTER VII.

THE YOUNG BANK PRESIDENT'S A. B. C.

"I WAS just thinking, Mr. Waldo, how convenient it would be had we a railroad passing through Williston."

Thus spoke young Vangrift to his old friend as the two were gliding over a smooth road, in a light carriage, and behind a fleet horse, on their way from Williston to Chestwick whence they were to go by rail to New York.

"It would, certainly, be an advantage," replied Mr. Waldo, "but I must confess I see no prospects for securing it. It would be possible, I admit, but it requires much money to build railroads, and against that I fear we haven't sufficient inducements in Williston for capitalists to take an interest in us. I know a railroad would greatly improve business, and add to the value of our property."

"I have thought much about it, Mr. Waldo, during the past few days," said Albert, "and if you will pardon my presumption, *I* believe there is a way for acquiring such an advantage. I think I could lay out a route for a railroad, which, if opened up, would prove a paying one, and would make Williston an important station. It is however necessary first to make capitalists believe it, I suppose."

"Yes, there would be the rub, Albert," jokingly responded Mr. Waldo. "Capitalists, as a rule, are conservative and cautious, and you must make schemes appear exceedingly favorable and sure before they will even so much as investigate them."

"True, Mr. Waldo, but capital seeks investment, does it not, as much as labor seeks employment? Either must be made reasonably sure of compensation. Now I think we ought to be wide awake in Williston and secure our share of advantage in this day of enterprises and improvements. Cities and towns are like individuals; great opportunities may be lost through indifference, or bright successes won by exertion."

I quote this small part of a long conversation as an illustration of our young banker's thoughtfulness upon business projects. As a fact, his mind was not only prolific of enterprises, but he was far-seeing as to their results, as well as far-reaching in his aspirations. When once thoroughly aroused over the accomplishment of a scheme, he was not to be easily diverted from it. He was pretty sure to keep at work until the undertaking was accomplished or its impossibility demonstrated. This was at a time when railroad building was an absorbing theme among men of large means, and when the thousands of miles of road were in course of construction throughout the Eastern States. It was the enterprise uppermost in the minds of the public, and in the commercial world particularly. Albert already felt a deep interest in the little town of his adoption, and was ambitious to secure for it railroad intercourse with other parts of the State and the outside world. He determined to lose no opportunity to advance this project.

In company with Mr. Waldo he was now, however, on his way to New York and Philadelphia where he expected to make a practical study of the details of conducting a bank. Mr. Waldo was a large shareholder in the newly organized bank at Williston, which was now nearly ready to begin business; and among his friends in New York and Philadelphia, he expected to secure for the young bank president ample opportunity for information. Arriving at Chestwick they took the train and were that evening safely landed in New York.

Early the following day, with letters of introduction to the president and cashier, Albert made his way to a certain large bank.

"Glad to see you," said the elderly bank president when he had finished reading the letter which Albert had presented. "We can easily give you the information you seek, and you need have no hesitation as to asking questions. As president of the bank it is my duty to preside at the meetings of the Board of Directors, and when the Board is not in session I act upon their authority. Our Board of Directors are chosen annually by the stockholders. At their first meeting the directors choose a president and cashier. The president, I may add, is taken from among their number, but the cashier is not even a stockholder. The rules of our bank prohibit the selection of a cashier who is a stockholder, and provide that that officer shall have no private dealings with the bank, not even as a depositor."

[Rules of this character differ widely in various institutions; but the one given is quite common.]

"The cashier, to whom I will introduce you presently, is considered the chief financial officer. All the workings of the bank are under his immediate supervision. In carrying on his work he is assisted by a number of clerks according to the extent and activity of the business. We employ over twenty. I think about twenty-five now. Some banks have more. In some of the 'country banks' as we call them, very few clerks are employed. The cashier often performs pretty much all the labor that here falls upon the clerks; and often, as you will learn, is really the only financial officer and operative of the institution. Where the business is larger he has a teller, or a book-keeper, or both to assist him. You see the duties and responsibilities differ according to the circumstances of the bank. Standing at the head of the inside workings the cashier is the person more than anybody else responsible for good management and accuracy of the details. It is he who comes directly in contact with the public and who enters into arrangements for the bank with its customers or depositor. The bank's correspondence is all conducted in his name, and its documents and reports bear his signature."

After explaining some minor details, the president invited Albert into the rear office. Here he was introduced to the cashier, to whom he made known the purpose of his visit.

"If you will accompany me," said the cashier, "I will show you through the workshop of a bank, and take great pleasure in any explanations."

A moment later Albert found himself in a spacious room surrounded by elaborate railings and partitions. A score of well-dressed clerks were poring over large account-books, and so intent upon their work that the appearance of a stranger attracted no attention. The tables, desks, and other appointments were elegant in workmanship. Within a small apartment, separated from the main room by a net of iron railing, were large piles of paper money strewn about upon the counter; miniature bags by the dozen contained the gold and silver coins. To the young man from Williston the scene was bewildering in its novelty.

The cashier halted. "This man," he said, pointing to one within the protected apartment, "is our First or Paying-Teller. It is his duty to take charge of the vault and its contents. He pays out all moneys, certifies checks for depositors, issues certificates of deposit and records his transactions in 'The Paying Teller's Cash-Book.'"

["Certifying a check" is the bank's guaranty that the check is good for the amount for which it is drawn. The operation is performed by stamping upon its face "certified by the —— Bank" and followed by the signature of the cashier or paying-teller according to the custom of the institution. It is the duty of the paying-teller, as soon as a check has been certified to have it charged, at once, to the account of the maker, for the bank is then responsible, and must hold the money in trust for the owner of the check. Thus, certifying a check is as much as to say, "This check is good for the amount named herein and we have this day withdrawn the amount from the maker's account and will hold it in trust for the owner of this check, until presented for payment." The purposes of having a check certified are various. If you were a dealer at a bank and wished to send your check away to another city, and wanted the party receiving it to be able to use it the same as money, or a bank draft, you would have it certified. Again, if you had a large payment to make and did not wish to carry the money with you, but had doubts about your check being accepted, you would take, or send it first to the bank for certification.

A "certificate of deposit" is, in ordinary words, a receipt from a bank for money deposited for safe

keeping which the bank agrees to pay at any time it may be wanted by the holder of the receipt. If you had a sum of money which you desired to place in a bank for safe keeping, and also that you might receive a small rate of interest, but did not wish to open a regular account at the bank, you would take out a certificate of deposit, which you could yourself hold, or could transfer to another person if you so desired.]

"A responsible position," said Albert, as he eyed the stacks of money, and observed how rapidly the teller handed it out through the small opening in front of him.

"So it is," said the cashier; "the responsibilities are of the gravest nature. They demand an unusual talent, and we appreciate the services of one who fills the place acceptably. It requires keen perception, excellent judgment, retentive memory and a character far above every temptation. The depositors of our bank, who keep, what we call 'active accounts,' are more than a thousand in number. All these this teller must be familiar with and carry in his mind. Should he at any time be in doubt about paying a check it is his duty to examine the dealers' ledger, or daily-balance-book which contains a list of all depositors with their balances; but an unfaltering memory is one of the essential qualities here."

[An "active account" is one in which the balance changes frequently. A merchant's bank account is almost invariably active, as the merchant deposits money often, generally every day, and during a day's business will draw a number of checks; sometimes the average will be twenty-five to fifty a day. Some people keep an account with a bank when they have very little occasion to use it, and their balance will change but a few times in a month. Such are not termed active accounts.]

"He pays out the money only, but does not receive it from the depositors?" queried Albert, much interested.

"It is the man there," said the cashier, indicating a busy personage within another small apartment, "who receives the deposits. He is the second or Receiving Teller. To acceptably fill this position we must have a man in whom we have great confidence. He must be thoroughly familiar with money that he may receive none not genuine; must be accurate in figures, and above error in counting currency."

"I will add here," said the cashier, "that the work of the receiving-teller is sometimes divided between two persons, one of whom is termed a 'Note' and the other a 'Deposit-Teller.' The deposit-teller has charge of all money coming from depositors; the other that coming from notes, or bills left for collection, or held by the bank as discounted paper."

["Discounted paper" signifies notes which the bank has bought at a price below their face-value —a certain rate per cent. having been taken off in consideration of money advanced upon the note before it is due.]

"We have also," said the cashier, "as you see here," stepping towards a man standing at a high desk, "a Discount-Clerk who has the immediate charge of all paper offered at the bank for discount, and also of all which we have discounted, or purchased. He has the keeping, in his work, of three important books of account. This book," showing one of large size, and handsome bindings, and with columns over which were printed headings, "contains an alphabetical list of persons who offer notes to be discounted; in the columns opposite the names are items of information showing the amount of each note and describing the paper, and collaterals if any."

[The "collaterals" which usually accompany notes left with banks for discount are stocks or bonds of some kind. They are held by the bank to secure the payment of the note, in case the maker fails to meet his obligation when due.]

"This is called the 'offering-book.' This accompanies the notes, submitted to the Board of Directors for their decision as to which may and which may not be accepted, or discounted.

"Another book is the 'discount-register,' as it is called, in which is transcribed the particulars of such of the offered paper as the Board has accepted and for which the money has been paid.

"The other book is 'a teckler.' This, as you will see," presenting a large volume, handsomely ruled and printed, "is also a record of discounted notes, or those left for collection, but arranged here in convenient form for reference as to the date upon which they mature. Upon this page," placing his hand upon the book as he found it open upon the desk, "appears a list of such notes as are due to-day, and none others. The paper is not recorded in this book in the chronological order of its re-

ceipt, as it appears in the discount-register, but in the order of its maturity."

"And what," asked Albert, "becomes of the notes which the Board refuses to discount? They are returned, I suppose."

"Yes, the rejected paper the discount-clerk returns to its owners.

"We now come to the Book-keepers," remarked the cashier passing along to a number of busy-bodies in the farther part of the room. "We keep four book-keepers at work on the depositors' accounts; and besides these is employed one General Book-keeper who has charge of all the accounts aside from those of the dealers. He keeps the 'stock-ledger' and the 'transfer-book' of the corporation; also the accounts with the various banks throughout the country with which we have dealings. It comes within his province to render statements showing the condition of the business, and to give much information, as it may be asked for by the Board of Directors. His relations are those of the strictest confidence and his duties require special skill and much experience as an accountant."

"And it requires four persons, you say, to keep the depositors' accounts?" queried Albert.

"It does, and I may say, too, that a much larger force is employed in some institutions. We divide our dealers' accounts into four classes, according to an alphabetical arrangement, and place one book-keeper in charge of each class. This is necessary in order to keep the accounts promptly written up to the hour. The chief skill necessary in this position is that of speed and accuracy. One who could not 'run up' a long column of figures with as much ease and rapidity as he could talk, would not be able to long fill a position with one of the dealers' ledgers.

"Besides the employees I have now spoken of, and who may be properly styled Heads of Departments, we have also an Assistant-Teller, whose principal business is to assist both the paying and the receiving-tellers in counting and assorting money; a Check-clerk, who keeps the check-list, and assorts the checks from the paying-teller's counter, putting them in shape to be entered in the cash book kept by that employee. Then, we have the Runner whose business it is to collect notes and drafts, present drafts for acceptance, serve notices of the maturity of paper, and to perform other similar duties. He is a busy person in our bank, though in some smaller institutions his labors are not arduous. We have an old and faithful employee who serves us as Porter.

"It may seem, at first, that the position of porter is not one of much consequence, but that is a mistake. While he serves in a subordinate position, assisting in various places where he may be most needed, he is more especially the attendant of the paying-teller whom he assists in handling coin. To the porter is entrusted the valuable packages which must pass to and from the Clearing House, the Express, or the Post-office. He carries the keys of the bank, looks after its cleanliness, sees that all its paraphernalia is kept in order, and is, in fact a general custodian. It is of the highest importance that he should be a man of strict honesty, fidelity and unswerving sobriety."

[The "Clearing House" is an institution in large cities for the especial accommodation of banks. It obviates the necessity of each bank sending a clerk every day to each of all the other banks against which checks have been taken, for the purpose of making collections; a practice that necessitates carrying about large sums of money and negotiable paper. At the Clearing House assembles, at a certain hour every day, a representative of each of all the banks, with the checks and other paper to be collected upon. These the clerk turns over, and in exchange receives the checks and other collections brought from other banks against his institution and the balance due, if any, is paid in cash. The first Clearing House was established, in a rude form, in London, in 1773. The New York Clearing House was founded in 1853, and that of Boston in 1855. There are in New York above sixty banks represented in the Clearing House of that city, and nearly as many in each of those establishments of Philadelphia, Chicago and Boston.]

As the cashier finished he had completed the circuit of inspection, and was entering again his own private office, from which he had escorted Albert an hour before. Here he offered the young country banker a chair and devoted another period to the discussion of various important details, which I shall not take your time to go over. Such subjects as relate to loans and deposits, collections, discounts, book-keeping methods, the employment of clerks, issuing currency, how to find a good cashier, and a teller, and others of a similar nature were all pleasantly talked over.

In the cosey library of an elegant house on Chestnut street, Philadelphia, sat a plain, quiet-looking old gentleman reading the morning paper. It was a wet, disagreeable morning, the rain at this hour, eight o'clock, falling almost in torrents. The reader dropped his paper, removed his gold spectacles, looked at his watch, and peered inquiringly out of the window.

The personal appearance of this genial old gentleman indicated, at once, that he was a man of more than common merit. His smoothly-shaven face wore an expression of benevolent kindliness, yet with its beaming gentleness was portrayed, too, a firmness of will, a stateliness of character, marked and interesting. His silvery-tinged hair in its peculiar and careful dressing denoted a methodical and precise disposition.

"Thee may tell Patrick," said he, addressing a busy servant, who answered his bell, "that I will not go down street at present. The rain may deal more gently with us in half an hour."

At that moment the old-fashioned knocker upon the front door sounded. A few seconds later a servant appeared in the room bearing a note.

"There's a bye in the hall, sir, waitin' for yez to giv' him an answer, if ye plaiz, sir."

Breaking the seal, and opening the note, the old gentleman adjusted his spectacles and read:

GIRARD HOUSE,
PHILADELPHIA, *May* 9.

MR. ENOS WARRINGTON,

DEAR SIR:

If it will suit your convenience I shall be thankful to have you call on me at the Girard House between eleven and one o'clock to-day. I wish to confer with you in reference to a position for your son. Am referred by your friend, Mr. Harold Woodburn of New York. Respectfully

A. VANGRIFT.

"A Vangrift!" repeated the old gentleman, "who I wonder can that be! I certainly do not recall the name — it must be some stranger. Referred by Mr. Woodburn! that's all right! But 'position for your son' — that's strange! I didn't know that our William had applied for a position! However I will go and see what it is the gentleman wants." And he dispatched a reply accordingly.

Mr. Warrington was a man of much wealth, and for many years had been a popular business man in Philadelphia. He was now, however, living retired, and doing little else than looking after his many large and profitable investments.

William Warrington, his son, was an energetic, promising young man who for more than two years had held a clerkship in one of the largest city banks. It was, to a degree, a position of trust, and he had filled it with high credit; but here the opportunity for advancement was contingent upon circumstances. It would come sometime, if he lived long enough, but so long as the present incumbents of positions above him were alive, and capable of discharging their duties, there was little hope of reaching a higher round in the ladder. His natural activity and ambition spurred young Warrington to think of looking elsewhere for promotion. This intention he had communicated, while on a visit to New York, to a family friend, Woodburn.

Young Warrington was in every way qualified for the position of cashier of the bank at Williston. He had been recommended for that place to the young bank president, and it was with a view to making certain inquiries of William's father that the note had been addressed.

Precisely at the appointed hour the elder Mr. Warrington walked into the Girard House and was conducted to young Vangrift's private parlor.

"This is Mr. Warrington, I suppose," said Albert, advancing toward the visitor with extended hand. "My name is Vangrift."

"I am glad to meet thee, Master Vangrift," was the response, as the old gentleman shook the hand of the young man. "It is thy father I presume from whom came the note this morning."

"No, sir," replied Albert, "it was I who sent it. Your friend Mr. Woodburn of New York, who told me about your son William, thought he might be induced to accept a position in our bank at Williston. But before conferring with your son I was advised to talk with you on the subject."

During this explanation the retired millionaire stood looking upon the young speaker with an air of suppressed astonishment. He naturally dropped into the opinion that the boy was a son of the president of a bank, and had come hither as his father's representative. He listened, however, attentively to all Albert had to say, and before the boyish voice had ceased the old gentleman found himself pleased with the frank, gentlemanly and business-like statement he had heard.

"And it is not thy father but thee who is president of the new bank in Williston?" remarked he, seeming to have at last fully comprehended the situation.

"So it is, I am sad to say," responded Albert.

"Indeed, sad?" said Mr. Warrington, noting the expression upon Albert's face. "I am sorry, my young man, if I have caused thee unpleasant feelings. And why sad, may I ask thee?"

"Because, sir, if it happily were as you surmise, instead of my unhappy position in life I should have a good father to whom I could look for counsel and assistance. I would prefer to have my father, sir, than to be president of all the banks in America, if such a thing were possible."

"Well, thee must be cheerful, my lad. I am glad to have made thy acquaintance, and I trust it may yet be reserved for me to be thy friend in many ways. I hope, too, we shall complete the arrangement which thee has proposed."

These words were uttered in a tone of honest sympathy and hope. Their cheering friendliness dispelled the despondent mood which was gathering like dark clouds in a clear sky. He calmed himself, wiped the moisture from his eyes, and proceeded with the business which resulted in arrangements for meeting with the young Mr. Warrington, though the details of the proposition were all fully agreed upon at this interview.

After the arrangements were completed for Mr. William Warrington to assume the position of cashier in the Williston bank, Albert was invited to remain a few days as the guest of the Warringtons; Mr. Waldo had, in the meantime, returned to Williston. During his short stay in Philadelphia the young man made a number of acquaintances among the retired merchant's friends, and they took a rather remarkable interest in the boy and listened attentively to his charming descriptions of Williston, its people and the surrounding country. It really was not owing to any peculiarity attached to these subjects that made Albert's accounts attractive, for they were not much unlike other places and peoples; it was Albert's own enthusiastic interest in them.

At Chestwick Mr. Waldo was to meet Albert and young Warrington and drive him to Williston. Stepping off the train, as it halted at the station, who should appear, almost as if by magic, before the young man and his companion, but Albert's sister Tama.

"Welcome home, brother!" said the girl joyfully as she tripped toward her brother with outstretched hands, giving him a reception that was as royal as it was to him unexpected. "Do not be worried, Ally," she continued, noting upon his face the coming sign of alarm. "I am here by invitation of Mr. Waldo. All are well and happy at home. Mr. Waldo just thought he would give you a little surprise and therefore sent for me yesterday to come down to Williston so as to be here and give you a home-welcome."

Pleasant introductions and greetings followed, and then Tama drove them over to Williston, and the three young people had a merry hour. Albert was drawn by young Warrington's genial and polished manners, and could foresee delightful companionship, and happy with his sister by his side, he looked out on life, for almost the first time, with sunny eager eyes.

WAYS TO DO THINGS.

By Susan Power.

LVI.

FOR THE SUMMER COTTAGE.

A SCHOOLGIRL friend wrote to me the other day, saying: "We have engaged a cottage in the country for the summer to which we are all going as soon as school closes. It is many miles from our home and it would be very expensive taking out furniture, so mother says we shall take only those things absolutely necessary, which means cooking stove, table, dishes, a sofa and beds. It seems to me the house will look so bare and desolate that we shall be thoroughly homesick in

a week. Can you suggest a plan to make the house look more tasteful and comfortable, for I want my brothers to think it a pleasant, pretty place, and to have a good time."

For summers and summer cottages to come, nothing comes in aid of the decorative sister better than Japanese wares. Of course the cottage has a porch, which I hope is at least twelve feet wide. A platform or wide balcony, without roof, but sheltered by a gay striped awning, which may be rolled up at pleasure, is better than a porch with heavy roof, beside looking lighter and more ornamental with scalloped edges boldly bound in red or blue. Out of doors, all signs of ease and pleasant occupation may cluster, the hammock with heavy red and blue tassels at each end, swinging between the trees, the strip of awning drawn from branch to branch sheltering a favorite seat under an apple-tree, the round table firmly set with smooth top, no wicker or rustic contrivance, but a convenient place for work and writing out of doors. The benefit of your summer is to be gained by living out of the house in sunshine and fresh air, and you should make it your rule, from the first fine days in May till the frost shuts you up again, to spend no hour in doors that weather will allow, save for indispensable dressing and sleeping. Breakfast and supper are pleasant served on the porch, and have the advantage of keeping flies out of the house. Reading, writing, mending, drawing, pressing flowers and sorting shells, should all go on where the big veranda tempts you into sweetest air and light, where you lay up sunshine and freshness for the year.

The out-door lounge is more essential than the hammock, as it stands anywhere, and is more solid and easy to use. A frame without back, having low end and corner pieces to hold pillows from slipping, should be covered with canvas, tightly stretched by rollers at each end. The frame is painted or oiled in the natural wood to stand the weather, and the cushion is in four large square parts, which can be changed easily. They are made of stout ticking filled with hair or fine excelsior, covered with dark red or blue. The deep red bath toweling which comes by the yard is very good, as it wears and washes, while it looks handsome as Algerine stuff, or silk turcoman. Cotton flannels dyed in rich colors for furnishing uses are much firmer and more lasting than the double-faced goods called fashion drapery, but nothing is better than thick, deep red German damask, which comes for tablecloths. When your deep red lunch cloths come to wear, put them to use for cushion covers, for which they are all the pleasanter and softer when washed and worn. You will do a good deal of lounging in summer, and for this, plenty of cushions are indispensable. Have your pillows large, square and full, with square cases of turkey red or dark blue linen, with broad tapes or ribbons to tie the open ends, so that you can take the white slips off, as the pillows come from the beds in the morning, and tie the colored day-cases on, in which they can be tossed and taken round, on the veranda, the grass or the sand without damage.

A screen for porch or garden seat is wanted, to keep your out-door freedom from full gaze of passers, without shutting off the breeze. Nothing answers as well as a fish net, or hammock netting, suspended from the eaves of the porch, or stretched from post to post at the height of a man's head. If the netting is dark, it will effectually baffle the eye of outsiders, while allowing full view from the porch, and free passage of air. The corner where one sits may be farther screened and made gay by hanging three or four of the large Japanese muslin panels, painted in light brilliant garden flowers, great pink asters, or white roses and purple canterbury bells, or branches of orchard blossom, and graceful swallow drifts across them. These panels or hangings, of cheap muslin, hand-painted in water-colors, come at fifty or sixty cents apiece, and are the prettiest things you can find for relieving the walls of a room. A dozen can be carried as easy as a quire of paper, and four pins or a touch of mucilage at each end fixes a picture to your door, or on your curtains, which makes a bare corner glad. The usual size is half a yard wide by a yard in length, and one will fill the narrow side lights of a bay window, or mask the lower sash of a common window, hung directly in the centre and stretched by tacks at each end. You can paste a gay flower piece by the edges directly on a dingy door, and remove it by wetting and soaking the border without injury to picture or door.

Your summer cottage needs no furniture beyond the indispensables which the careful mother proposes taking. The absence of fussy things, which strikes you as bare, is precisely what is desirable,

for lambrequins and tufted furniture, carpets and draperies prevent the free airiness and ease of getting about which is grateful in the sultry season. Your sitting-room, like the rooms of seaside villas and the saloons of Spanish aristocrats, should be limited to table and seats, with a cabinet or corner cupboard for books and china. Bare floors, or covered with check matting, a bare table, polished and dusted to mirror-like perfection with a glass of columbines and fern perhaps, or daisies and grass on an ornamental plateau in the centre, a deep blue curtain of cotton or linen hanging in the doorway, which is seldom shut, muslin or lace at the windows, with no headings to keep out the air, swing-windows with large vases of flowers on their ledges, the lightest chairs, wicker, willow, rattan, shaker, or rush-seated, a sofa with linen cover, washed freshly every fortnight at farthest and tied on with big scarlet or blue bows, and unframed photographs and scrolls on the wall, are comfortable and picturesque enough for anybody. A Japanese parasol for a lampshade, the lower sashes filled with crepe pictures instead of stained glass, a square oriental lantern for the hall, a papered screen in light frame, add pleasant color, and will be all you care to keep in order, for if dust, litter and griminess are disagreeable at any time, they are insufferable in warm weather.

For the bedrooms, plain white or ecru linen toilet-covers edged with firm lace are pleasanter than puffed muslin and bows which hold the dust. Bed-spreads of bright deep blue percale, or twill, or of turkey red cotton are convenient for summer beds, when white is not easily kept fresh. Boys prefer colored spreads, which bear rough handling and look gay. Pretty ones for their rooms are made of the wide-striped ticking, in gray or blue, with large herring bone of red and blue cotton or crewel worked down the white stripes. Girls' rooms look best with white spreads or those in light chintz colors. The white spreads look pretty with pillow covers of pale pink or blue zephyr gingham in solid color, ruffled and edged with narrow lace, a notion I took from the Mexican girls' dormitories in the convent school at Santa Fé. The colored pillow-covers are really dainty, over the white linen, and make one think of pink asters or bluets against the snowy quilts. For a change, you may have the floors painted a soft blue, or lacquer red, well varnished, and use the gray, or blue-gray Japanese mats of tufted cotton which are very cheap, costing from one to four dollars apiece, according to size. Each trunk needs a cover of unbleached linen, bound with red or blue, or of glazed chintz, from which the dust may be wiped with a handkerchief, and with a pine footstool, the length of the trunk, also covered with the same chintz and set before it, makes a cosey seat, whether you choose to sit on the trunk and rest your feet on the stool, or sit on the latter and lean against the trunk. The Japanese paper napkins, not the cheap Yankee imitation, but the real crepe and crinkled ones, with faint rose or sap-green figures, or gauzy and film-figured till they are the idealization of paper — these are convenient to have about, half for use, half for their prettiness of delicate, low color. They are useful on the tea table, to throw over dishes of fruit, half veiling the ruby of currants or cherries, or over cake, where the dim colors show pleasingly with the silver. In the sitting-room, a large soft crepe is just right to throw over a work-basket or a lamp-globe, or keep the dust from a pile of papers. They answer for mats for the toilet table, and the paper mats themselves, of stoutly woven fibre, with curled edges, and lightly painted with a loose pink rose or blue-bottle flower in Pompadour colors are pretty to arrange in a row above the wainscot or around a mirror-frame on the wall as if they were plaques of china, which could be no softer or more sweetly colored.

But one caution let me suggest, in your decorative attempts with Japanese fans, or mats or parasols — don't put them so far apart that they have a spotty effect. Move your fans so they overlap, and form masses of color, put three behind one corner of the mirror if you have no more, instead of sticking one at each corner and one in the middle, make a large heading above a picture or window, but do not undertake to fill one side of the entry or the space above the sofa with a trophy of fans or parasols. A large plain bracket with a growing plant which is changed every week for one from the garden is far finer. Don't be afraid of blank spaces when your walls are freshly tinted or have a clean, pleasant paper on them. Simplicity is more acceptable than this bedecking the walls with trinkets, like a stall at a fancy fair.

SOME SUCCESSFUL WOMEN.

By Sarah K. Bolton.

VII.

ELLA GRANT CAMPBELL.

THERE stands beside me as I write, a bouquet of exquisite flowers; pink and yellow roses, lilies-of-the-valley, red and white carnation pinks, and, loveliest of all, daisies. I have just brought them from a large and well-kept greenhouse, on Jennings Avenue, Cleveland, Ohio, owned and managed by a young woman whose taste and ability make it well worthy of a visit.

And I can but wonder as I look upon this beautiful and successful business, and see how refined and how sunny and happy is the young woman who manages it, whom I have known for years—I can but wonder, I say, that more women do not take up the business of floriculture. There is hard work in it, as in every other calling—patience, care, perhaps even the creation and training of a good market-demand for plants and flowers—but tending upon flowers and developing them, is really work so dainty and pleasurable that it seems especially fitted to the hands of those women who shall be willing to study the nature and the habits of the flowering and decorative plants.

Mrs. Campbell can best tell her own story of effort and well-deserved success:

"When I was thirteen or fourteen years of age my father met with reverses which rendered him penniless. I was obliged to do something to help the family exchequer.

"After trying crochet work, delivering butter to father's customers in his new business, I began to feel discouraged and long for talents and a vocation. One thing I heartily loved to do, and that was to care for my flowers. At this time I read of a young girl who was enabled, through her own exertions, to build a greenhouse. The tale fascinated me. Why could not I be a florist? I would! My vocation was found! Every fibre of my being vibrated in harmony with the thought.

"Fate was kind, and threw just the opportunity desired into my pathway. Passing out Euclid Avenue one bright afternoon (eleven years ago last fall), I noticed that Mr. Jaynes had just built an expensive office. He would want a girl to take care of it! I entered, found Mr. Jaynes; asked him breathlessly, 'If he didn't want a girl to take care of the office, learn to make up flowers, and do anything that she could to make herself useful?'



ELLA GRANT CAMPBELL.

"'Yes,' he needed such a girl, and I was 'just the one he wanted. The active way I jumped in and out of the wagon pleased him.' I was engaged to keep books, wait on customers, take care of the office, and make myself 'generally useful.' I had been in my position three or four months, when father met with an accident and I was obliged to go home and help take care of him. Mr. Jaynes told me on leaving that 'in everything I was sat-

isfactory except making up.' That 'my work was too loose and scraggy,' and that 'he did not think I would amount to much as a florist.'

"I went home very much discouraged. But I loved flowers, and plants and flowers I must have. A gentleman (a true lover of all plant forms), Mr. Taintor, deputy post-master of Cleveland for twenty-five years, presented me with some small plants and choice cuttings from his private greenhouse. And at different times mother would invest from ten to twenty-five cents in market plants for me, until by the next fall I had quite a nice collection of choice plants. I secured twenty-six native varieties of hardy ferns from the woods, which I planted on an old table, and in a hanging basket of old hoop-skirt dipped in sealing-wax.

"This fern basket and table were my especial pride that winter, and more than one came to see my collection. Besides, I had one hundred and seventy-five plants in pots and in boxes, old butter crocks, and anything that could be utilized.

"Mother allowed me to have our front room, which has two east windows and one north window, for my plants. I had only a poor apology of a soft coal stove for heating. On cold nights I used to move all the plants into the middle of the room, and wrap them up in newspapers to keep them from freezing or getting chilled. We had an unusually cold, severe winter. I would sleep on the lounge in the room and get up sometimes three or four times a night to replenish the fire, but I succeeded in bringing my plants safely through, while most all of my friends had theirs destroyed. One day as I was looking through Mr. Taintor's garden, I came across a pile of sash and other materials pertaining to a greenhouse structure. I asked him what it was and he told me it was an old greenhouse he had taken down and brought in from his farm. Turning to me, he said: 'I'll sell it to you cheap and you can take your own time in paying for it.' I asked him 'How much?' more for conversation than with any idea of buying it. 'Well,' said he, 'I'll sell it to you for ten dollars and you can pay me when you are able, and there is a quantity of bricks and old lumber out on the farm now which you are welcome to.'

"At the supper table that evening I repeated what Mr. Taintor had said, whereupon my younger brother Bert remarked, 'I tell you what, Ella, you take it, and I will put it up for you, if you will only get those plants out of the house.' (Bert used to be called on to help me move the plants.)

"The next day we went to the farm and inspected the débris there, came home, and concluded to try it. I never could endure anything ugly, and though Bert did a large share of the carpenter work, and I set over half the glass myself, I found it had cost for lumber, glass, nails and putty a trifle over one hundred dollars. This included the labor of a carpenter for three or four days to help Bert. My total cash assets to start with were fifteen cents. The lumber, glass and putty I obtained on credit. I told the parties from whom I got the goods that I could give them no security but 'my word.' But they were very kind, and offered to give me what credit I needed.

"Well, I was one hundred dollars in debt, and no heating apparatus in either. I rigged up, with the help of my brother, an old stove that had been stored in the barn, in one corner of the greenhouse, moved my plants in from the house, went to Mr. Jaynes, told him what I had done, and got credit for plants.

"It was then the last of April or the first of May. I went among my acquaintances, told them I had plants for sale, and solicited orders for hanging baskets, plants, or cut flowers. Every day father was not using his horses I would take one and deliver orders, also take out plants and sell them. To be brief, I cleared my greenhouse of debt by my spring work. I did all the work myself with occasional assistance from my brother. That fall we put in a flue and furnace. My first greenhouse was eleven by eighteen feet, with glass on sides and roof, and adjoining the house. I had tried to do all the work *well*, that was given me to do, but I was a struggling girl, and I had a hard time.

"The next spring my greenhouses were full of fair market plants. I strove to grow only choice varieties, or something that was not grown in profusion by the other florists; I bought plants in quantity from Mr. Jaynes and others, restocking my houses several times. From the first I have always believed in pushing business, and I went after my orders, instead of waiting for them to come to me; though I always endeavored to keep within the limits of good taste in this direction. That fall I determined to make a bold stroke. I would build a greenhouse large enough to grow my own cut flowers. My brother, who had been

away, came home at this time, and we built a greenhouse twenty-two by fifty-five, with a shed twelve by twenty-two at the end, where our furnace was located. This cost about three hundred and fifty dollars. It took two years to pay for it. We also purchased a horse. It was during these two years that I commenced to push 'my floral design' work.

"I was craving for a recognition from the other florists, and I could not see any better way than to meet them on their own ground, on their own level. I have always been most anxious that my work should be judged with man's work, or in other words, on its own merits. My first exhibition was at the State Fair at Columbus.

"I arrived before any of my competitors, and found the flowers pretty badly shaken up. My largest piece, a combination of a heart, anchor and Bible, came to hand turned over on its side.

"Bouquets and baskets were in various stages of perfection and imperfection and decay. I looked at my carefully prepared work and felt blue. But I picked up my spirits and went to work. I had taken the precaution of bringing loose flowers with me, and these I soon utilized, repairing what damage had been done as far as was possible. I received many courtesies from the officials and was placed on the awarding committee for amateurs.

"When I viewed the designs brought in by my competitors I began to be sure I had no chance against fresh flowers, and such excellent work. I was agreeably surprised when I received first premium on hand bouquets, and second on display. The first premium was also given to a woman, Miss Maggie Evans of Columbus, Ohio, who has a great native talent in floral arrangement, and I am glad to say she has been a warm personal friend from the day we were active competitors at the State Fair at Columbus.

"I now made up my mind that if I was to succeed professionally, I must get thoroughly well-known and identified with my business. Three or four large wedding orders that were placed in my hands at this time, and in which I was allowed to use my judgment, were more favorably spoken of, and our local press gave me many compliments.

"The next year I exhibited at the Northern Ohio Fair. Here I knew I must meet with the sharpest competiton with our old, established florists. It proved to be a hot, dry, sultry day, with just wind enough to keep the dust in motion. The flowers and designs had to be transported over seven miles of dry, dusty roadway before reaching their destination in Floral Hall. On arriving at the grounds the Superintendent of Cut Flower Hall met me and said: 'It's no use, your bringing your flowers here. *You* can't compete with the designs in there,' indicating with his hand the building occupied by the cut flower department.

"My flowers at that moment arrived, and the florists crowded round to see what I had brought. I could hardly suppress my emotions when I found that, owing to the rough pavements, there were places where the flowers were shaken out almost as large as a man's hat. The other florists had their exhibits entirely in place. And I felt indeed as though 'I could not compete with the designs in there.' It was then five o'clock, and I worked until dark, when my brother and the Superintendent took turns holding lighted matches for me to see by. The premiums were to be awarded the next morning; but so discouraged did I feel that I could not be induced to visit the grounds. (I must confess to a good, hard cry.) But mother and brother went out, and I stayed at home and worked, and worked, and chided myself for my presumption in thinking I could compete with those who had so much better facilities in skilled labor and choice flowers. By the time they had returned at night, I had worked myself into a proper submissive mood to receive the news I expected them to bring. Mother came in, and sitting down, said, 'Well,' in answer to my inquiring look, and drew forth from her pocket a yellow piece of card-board and handed it to me. I thought she was teasing me, and said: 'Mother, how can you!' I still thought she had palmed off a bit of useless card-board on me. 'Read it,' said she, and through my tears I managed to read—'1*st premium.*' Even then I could scarcely believe the good news. 'Mother,' said I, 'you are unkind.' 'Why, it's yours, child. 'Twas on the table design when we got there.'

"Can you imagine my feelings? From one extreme I rushed to the other. I was wild with joy. I hugged mother. I waltzed around the room like a crazy girl. I had been weighed and not been found wanting! I had ideas! I had come out victorious in a fair and square test with those who had every facility at their command. I have passed through other such scenes since, but the

most exciting test of abilities would not raise me to such a fever of delirium as that first public acknowledgment of my success in competing with our old and well-established florists.

"Not the least pleasant feature of the exhibition was, that on the following day some of the competing florists came to me and said: 'You have won it fairly! It belongs to you rightfully.'

"All our papers spoke in praise of my efforts, and it was the means of giving me a general introduction to the public as a commercial florist.

"Two years afterward my brother went into business with me, and we erected a larger 'forcing house.' This was built running east and west with a long slope facing the south. Peter Henderson's *Practical Floriculture*, presented by Mr. Taintor, was our text book. At this time we had the pleasure of an acquaintance with Mr. John Thorpe, now so well known as the president of our Society of American Florists. Mr. Thorpe is a friend to struggling young florists: such we found him, always willing to give information, and a walking encyclopædia of useful information pertaining to floral subjects. Our new house was located on a strip of land we bought next to father's, and is the property we are now occupying.

"The house was planted to Roses, and Bert had unusual success with them, considering that the heating was done by flues. In fact this house at the present writing is in full leaf and blossom, with not an insect or a speck of mildew to be found. In 1881 my brother left me to enter business in Chicago, and from that time to the present I have given my personal care to all departments of the business. In 1884 I built a long-wished-for addition, our new office and greenhouse. This last was built for tropical and decorative plants.

"For some years I have done all the watering of my greenhouses, believing that by so doing I could keep track of all the little things that go to make up the sum total of success. I find, also, that watering is one of the most important operations connected with the practical running of a greenhouse. To give or withhold water from different plants at different times of the year requires experience and the nicest judgment, not only for different plants, but also for the different stages of the same plant.

"In regard to the future of woman in horticulture, I regard it as bright. Any woman can do what I have done, and better if she has capital and experience."

But Mrs. Campbell has not referred to some of her signal successes. So let me mention one or two. For instance: When President Garfield's body was brought to Cleveland for burial, the streets of the city were, of course, to be beautifully decorated with arches, and all that money and taste could do to make the city worthy to honor its great statesman, was to be thoroughly done. Mrs. Campbell received notice on Thursday noon, that she had been designated to superintend much of the floral work. She began at eight in the evening, with a force of picked men and girls, upon whom she could rely, and slept but two hours each night until the streets were made ready for the passing of the solemn procession. Her designs were original and elaborate, yet with beautiful breadth of effect. Each arch was impressive, all the commemorative lettering distinct and symmetrical. The verdict of the press was: "Every piece is a work of art, and will bear the closest inspection."

Mrs. Campbell is celebrated for her decorations for fine weddings; she is not only an artistic originator, but is also a constant student, experimenting and combining, and also has developed the business tact and talent to "win trade" which she holds by her genuine courtesy and candor, and her painstaking to give satisfaction. No order however small misses of her personal attention.

These are the business-rules framed and hung in her office:

Advertise thoroughly.

Carry the best stock.

Sell at small profits.

Improve every opportunity to increase trade.

Her books are kept with system. She is quick to act, can and will accommodate herself to the taste and wishes and need of her smallest customer.

And still this successful florist, this thorough business-woman, is scarcely yet out of her girlhood, a slight, fragile creature.

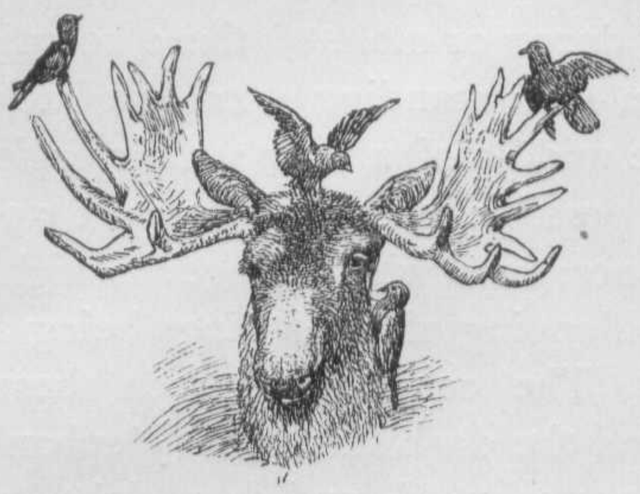
Why is not this an ideal industry for women? The more flower-growing the better, the more lovely our homes, the more refined our nation.

WONDER-WINGS, MULLINGONGS, COLOSSI, AND OTHERS.

By C. F. Holder.

VII.

FEATHERED SENTINELS.



THE GUARDIANS OF THE MOOSE.

To show some of the curious relationships that exist between birds and animals in entirely different walks of life is the purpose of this chapter. One of the most interesting of these is the guardianship exercised by certain birds over various large animals, the latter admitting a familiarity that is often obtrusive, but permitting it, well knowing that the birds are their friends. Of the several benefits obtained by the larger animals from this association is immunity from surprise; the birds being veritable sentinels, standing guard with all the vigilance of veterans, and announcing loudly to their lordly companions the slightest semblance of danger.

In Canada, and occasionally in the northern part of Maine, is found the great moose, prized by the sportsman as a trophy, and hunted for food by the woodsman of the far North. Once when a party of hunters were following a trail in the northern country, they observed the tracks of one of these animals and began carefully to trace it, hoping to secure the great game. They moved slowly on for some time when suddenly they were startled by a number of Canada jays which rose into the air, fluttering their wings, and uttering discordant cries. Their motives were so remarkable that the hunters stopped, thinking that perhaps the birds were engaged in a battle, and being naturalists they wished to see the result. As they took seats upon the ground the birds all suddenly dropped together.

Determined to learn the occasion of this manœuvre, one of the hunters made a detour, and ascended a rock which overlooked the spot. As he peered over the edge he saw to his astonishment an enormous moose lying upon the pine needles evidently fast asleep, while all about, upon its horns, ears, and back, the large birds were standing or running about. He watched the performance for some minutes, and then having a fair shot rose and prepared to fire. But the warning of the sentinels proved effectual, for at the same instant the moose sprang to its feet and dashed off, escaping the ball intended for it.

In Central America wild cattle are attended by a curious bird called the ani, which performs for them a similar service, often clinging to them in great numbers. As they have a singular habit of tipping up their tails and assuming various attitudes expressive of surprise or other emotion, the back of an ox frequently presents the appearance of a mimic stage, upon which feathered acrobats or contortionists are performing their feats.

It is in Africa, the Dark Continent, that we find the most remarkable examples of this phase of bird-usefulness. In this wonderful country of mystery and surprises have been found many large animals attended by remarkably vigilant sentinels, and where the great game is hunted by man they are of exceeding value to their huge consorts.

One of the most familiar birds which seem born sentinels, is known to naturalists as Buphaga, the common name being ox-biter or ox-pecker, from the belief of the natives that the birds nip and bite their oxen, which they undoubtedly sometimes do. One of the most attractive of these feathered sentinels is the red-beaked ox-biter, *Buphagus erythrorhynchus*, a bird about the size of our common robin, a little larger, and more robust, and withal a very jaunty fellow, with a red beak, as its name indicates, and a sharp eye of flaming gold; even the eyelids partaking of the vivid hue. Its back feathers are a grayish-brown, while the under ones grade to a light yellow. For generations these birds have acted as sentinels to such large

animals as the camel, ox, hippopotamus, elephant, and especially the rhinoceros, one of their names being "the rhinoceros-bird;" and while we may appreciate the little creatures' attempts to protect and warn their great friend they are a source of great annoyance to the hunter, who, after following an animal for hours over a rough country, under an equatorial sun, finds that he has been spied out by the sentinel who gives his warning, which, like the "all's well" of the human soldier, is passed from throat to throat — only in this case it is "all's wrong!" — until a perfect chorus of cries warns the rhinoceros to be off.

The rhinoceros-bird, when upon the white species, presents a curious contrast. Sometimes a flock of two dozen are seen running over its body; clinging to the tail or ears, or upon its sides like a woodpecker to the bark of a tree, the rugosities of the animal's hide affording an equally fine clinging surface. Oftentimes they perch upon the horn of the animal, and again both horns and the ears are utilized by the sentinels as perches. This bird is frequently seen upon the Cape ox, which is considered one of the most dangerous game-animals in Africa. They not only follow them, alighting upon their horns, heads, and every available portion, but when a herd of tame cattle are unharnessed and released, the birds, which have been watching proceedings from some neighboring tree, pounce down upon them, and soon each ox has its quota of vigilant sentinels, and they have again and again been known to warn the tame animals of the approach of lions, and so saved them. New cattle, which have never been into the interior, are often alarmed at first at this seeming attack of birds, and rush about, tossing their heads to avoid them; but as soon as they discover that they intend no harm they submit quietly to their presence.

That the birds have some attachment for their huge friends there can be little doubt, and the account of hunters reminds me of the fish remora which I have often taken when catching sharks in Southern waters, the attendant fishes fastening themselves to their great consort, and allowing themselves to be hauled entirely out of water with it. So with the rhinoceros-bird. In an instance where a rhinoceros was chased for some time by a hunter on horseback, the birds not only followed on, but clung to the creature's hide though repeatedly brushed off by the trees; and when the animal was finally shot they remained near, and when the hunters approached it the next morning the faithful little creatures were still clustered about their dead companion, and as the natives drew nearer, they brushed their wings in its face, and used every endeavor to awaken it, evidently believing it asleep, and retiring only when the men took possession.

Besides the ox-biter a small white crane often alights upon the back of hippopotami, rhinoceros and elephants. A dozen or more of these beautiful birds have been seen standing upon the back of an animal in the middle of a river; their eagle eyes alert for any possible enemy that might appear. They utter no sound when danger is nigh, merely rising; the flapping of their wings being a sufficient warning. The contrast between these pure white birds and the dark skin of an elephant or rhinoceros is very marked, and is a sight to be seen only in the solitudes of the Dark Continent.

It would seem quite remarkable that birds should act as sentinels to large quadrupeds; but, stranger yet, we find several which appear to hold this office in the interests of their own kind. An interesting instance was observed by a naturalist in North Africa. He was wandering through the forest in search of game, when he noticed a large number of beautiful copper-colored fly-catchers (*Lamprotornis*) dart into the air, uttering loud cries. Concealing himself, and peering through the bushes, he witnessed a most ludicrous and strange sight. The open place beyond him was filled with a larger body of storks, *Sphenorhynchus abdimii*, grave, grotesque fellows, each of which bore upon its back or head a copper-colored little bird, which every now and then darted to the ground, immediately returning to its perch. The large birds were moving solemnly along in a regular phalanx, each with its rider, their object being the locusts which they devoured as they marched. After watching this curious sight for some time the observer showed himself in the bushes, when the fly-catchers gave the warning, and big birds and little immediately took wing and flew away.

In North America we find a curious bird, the spur-winged chauna, *Chauna chauvaria*, which is not only a sentinel but when domesticated a veritable watch dog; showing remarkable pugnacity when the safety of any of its friends is threatened.

Its voice is so loud, discordant, and piercing, that it is called "the screamer." Its cry alone is sufficient to demoralize an ordinary enemy, but besides this, the screamer has a wonderful defence — two spurs, or horns, upon each wing, pointing forward, with which it can strike a powerful and lacerating blow. The natives of South and Central America recognize this peculiarity in the bird, and take it when young and bring it up in the poultry-yard where it forms an efficient guard against hawks and other predatory animals. It will not retreat even before the puma; advancing with such a stilt-like legs from their darts. Many planters in the French colony keep the birds about their grounds, where they become perfectly tame, standing about, always on the watch for enemies from the reptilian world.

All the previously mentioned birds, it will be noticed, use their faculties to protect something or somebody, to warn of danger; but as in the human family, there is always a traitor, one who for selfish ends will expose the home or store of another, and in the feathered tribe this traitor is the honey-guide, *Indicator Albirostris*. This bird is extremely



FAITHFUL SENTINELS.

ferocious mein that the great cat is often quite routed. Shepherds employ them about their flocks, and several "screamers" have been seen standing before a lamb which was threatened by a puma, and by their screams awakening the shepherds from their siesta to come to the rescue.

The famous secretary-bird of Africa has been employed as a sentinel in the French West Indies, where it was introduced a number of years ago to prey upon the rattlesnakes which had increased to an alarming extent. The birds attack these reptiles with great avidity, being safe on their great fond of honey, as its name signifies, and unable, as a rule, to enter the trees itself it makes the most astonishing advances and signs to human beings in its endeavors to induce them to open the hive.

The honey-guide does not always lead hunters to honey. One persistently flew about Drummond, the African trader, darting in front of his face, until it almost forced him to follow, then after taking him over a rough country led him into a dry water-course, and there pointed out a huge snake — in this case acting as became a sentinel.

On another occasion the same hunter was troubled with the unceasing attentions of one of these birds, and finally after following the little creature for half a mile, expecting every moment to see a leopard or lion which had excited the bird's ire, it led him to a tree, at the foot of which he was much surprised to find one of his hunters who was fast asleep instead of being off at work as he had been ordered.

We sometimes hear in this country of secrets being whispered by little birds, and it would seem to be a reality in Africa.

SEARCH-QUESTIONS IN GREEK HISTORY.

By Oscar Fay Adams.

VII

THE ATHENIAN DECLINE AND THE THEBAN SUPREMACY.

121. What important event is said to have been told to the Athenians by a barber who was treated as a tale-bearer and tortured?

122. What revolutionary event ended the Athenian democracy?

123. Who was Tissaphernes?

124. What battle practically ended the Peloponnesian war?

125. In what year did Athens surrender to Lysander?

126. What is meant by "the thirty tyrants"?

127. What political leader was nicknamed "Cothurnus" and why?

128. Who was the most prominent of "the thirty tyrants"?

129. What philosopher was prohibited by them from all conversation with youths?

130. How long did their sway continue?

131. What Persian prince led a large force of Greek mercenaries against his brother?

132. What famous book relates the adventures of these Greeks?

133. Name the principal Theban hero.

134. Name his most noted Spartan military contemporary.

135. What nations contended at the battle of Leuctra?

136. What city sent in the year 370 to beg the assistance of Athens and with what result?

137. What was "The Tearless Battle"?

138. How many Theban invasions of the Peloponnesus were there?

139. On what occasion was a temple of Jupiter made into a fortress?

140. What event terminated the supremacy of Thebes?

ANSWERS TO APRIL SEARCH-QUESTIONS.

81. The Lydian monarchy.

82. Crœsus.

83. They became subject to Persia.

84. Polycrates of Samos.

85. The complete subjugation of Ionia, or Asiatic Greece.

86. The embassy sent by Athens to Sparta calling upon the latter as the principal Hellenic state to punish the Æginetans for betraying the common cause of the Greeks to the Persians.

87. Marathon.

88. Miltiades.

89. Themistocles and Aristides.

90. Xerxes.

91. Thermopylæ.

92. At Salamis.

93. Artemisia of Halicarnassus.

94. At Platæa.

95. At Mycale near Miletus.

96. Pausanias.

97. Themistocles.

98. The Confederacy of Delos.

99. Aristides.

100. At the Battle of the Eurymedon.



A YOUNG PRINCE OF COMMERCE.

By Selden R. Hopkins.

CHAPTER IX.

A PROPITIOUS DAY FOR THE WILLISTON BANK.

IT was a brilliant morning in June, as befitted this day of days on which the "Bank of Williston" was to open to the public its doors and its treasury.

For this important event every preparation had been carefully made. Quarters both agreeable and commodious had been secured in a cheerful, substantial-looking building and at a prominent corner upon the main street. With good taste, and yet with proper economy, the banking-room had been fitted up. Counters, desks, railings and other furnishings were in harmony. That every unnecessary expense should be avoided Mr. Warrington had cheerfully taken upon himself the double office of cashier and teller. During banking hours, should Mr. Warrington be absent, President Vangrift proposed to stand at the teller's counter. The service of one bookkeeper would suffice to keep the accounts in order. As Williston had no other banks, and as the number of acceptances coming here for collection would not be large, the employment of a runner had been deemed unnecessary. No special clerk would be required to attend the clearing-house; but a porter had been engaged. In the rear of the main room was the private office of the president and that was held to be sufficiently commodious for meetings of the directors.

The hour for opening the bank was at hand. In the private apartment President Vangrift was engaged with business correspondence. Mr. Warrington, at the receiving teller's window, stood in readiness to receive deposits, and open accounts, with the new bank's customers.

[The rules observed in banks of large cities are seldom found necessary in country institutions. Before strangers are allowed to open accounts in prominent city banks they must invariably be introduced and vouched for by some person with whom the officers of the bank are acquainted, and in some cases it is required that the patron shall make an assurance that his account will seldom or never fall below a certain amount on deposit. Intending depositors must satisfy the bank officials of their respectability and good standing in the community. The amount of their bank account is, however, too often made the test of respectability.]

The bookkeeper was at his post, and upon the steps in front stood a number of persons waiting for the bank-doors to swing on their hinges.

The hour of ten arrived. Promptly the porter pulled the bolts, turned the key, and swung open the doors. At that moment a handsomely-attired young lady stepped quickly into the building and stood before the receiving teller's window, followed by the undivided attention of every person present. Her dress was elegant, but it was her personal beauty that attracted attention. She was sunny-haired, blonde and rosy, rather tall and stately in her plain rich carriage dress, and there was a touch of imperiousness in both her glance and step.

There had been some good-natured strife among the village merchants as to who should have the honor of opening the first account at the new bank. It was this that had brought so many upon the steps even before the hour for the institution to open its doors. Notwithstanding this, when this young lady had appeared upon the scene all stood aside and allowed her to take the first place at the door, and through courtesy, she was permitted to lead the

way when the doors parted at the motion of the bank-porter.

"I wish to open an account, Mr. Teller," said the beautiful stranger in a low but business-like tone, "and have for deposit a check on a Boston bank; will you accept it?" While speaking she had opened her portemonnaie and taken out a small paper, which was now passed through the window to Mr. Warrington.

"I presume it's all right," said the young man, "but I would prefer that you be identified. Do you know any one here?"

"I am a stranger here," the young lady answered, "but I believe the president of the bank, Mr. Vangrift, will identify me; at least he will know the signature to the check."

At this William Warrington looked closely at the check, which read:

"*Pay to the order of Annie Crosby twenty thousand dollars.*"

"I will accept this," he said, "and will ask, if you please, while your book is being made out that you take a seat in President Vangrift's office which is directly at the end of the lobby. The bookkeeper will show you."

"I will, thanks," she said; "but I have a request to make. I believe this is the first depositor's account you have opened?"

"It is."

"Then will you please note upon the account, and upon my book, an indication of that fact?"

"With pleasure," replied the obliging teller.

"Is this President Vangrift?" said the young lady, as she appeared at the door of the president's private office.

Albert, all unconscious of what had been going on at the teller's window, and absorbed in his letter-writing, had hardly realized that the doors of the institution had been opened for the first time to the public; he was just rising from his chair, pen in hand, eyes still upon his paper, to welcome, as he supposed, some person on business, when the sound of the young lady's voice startled him.

"I see you don't recognize me; it is Miss Crosby," said the young lady with a rather mischievous smile.

"Oh! I beg pardon, Miss Crosby. Really I did not recognize you though the voice somehow seemed most agreeably familiar. Truly I am happy to see you. And where is Mr. Crosby?"

As an assurance that Albert was delighted to see his friend words were unnecessary; the expression upon his face was sufficient. More than a year had passed since Albert and Miss Crosby had last met, and during that time both had changed much. Somewhat appeased was his chagrin when assured by his charming visitor that so altered was his appearance she probably would have passed him in the street without recognition. Since the thrilling scene at the fair in which Albert had saved his visitor's life he had met Miss Crosby but once, and then only for an hour or two at the residence of her father in Boston.

The young lady now explained how in company with her father she had started from Boston, and how at a neighboring village Mr. Crosby had been detained on business; and that his daughter might reach Williston in ample time to be the first one to open an account at the new bank the Boston merchant had procured a special conveyance and hastened her away at an early hour in the morning. "It was almost especially for this," said the young lady, "that father left his business to come here now. He was very desirous that I should have the honor of opening the first account at your bank."

Later in the day Mr. Crosby arrived and during the evening Albert enjoyed a pleasant visit with his friends.

But let us turn again to the scene at the teller's counter. Among the early depositors were Mr. Waldo and Mr. Harwood, with handsome amounts for the beginning of their dealings. To the surprise of officers and directors many well-to-do farmers came bringing to the new vaults their money for safe-keeping. All the circumstances connected with the history of the bank, and how young Vangrift came to be chosen its chief officer had been well circulated and proved a favorable advertisement, which won friends and created among the people a rather romantic interest in the new institution.

"Our deposits to-day," said Mr. Warrington, speaking to one of the directors at the close of the day's business, "are a little more than fifty thousand dollars!"

"I am quite surprised," was the reply, "for I did not presume they would amount to a fourth of that."

"But that is not the best of it," exultantly remarked Albert who had been carefully looking

over the day's business. "We have a number of very favorable offerings, for large amounts, which we shall lay before the board at its meeting to-morrow."

[An "offering" is a note presented to a bank with security, or endorsers for discount. It is through the opportunities of banks to loan money at fair rates of interest that they are enabled to realize a profit upon their deposits. As depositors pay nothing for the privilege of having their money taken care of the bank must keep a large share of the money thus entrusted to them loaned out at interest, or invested in profitable securities, or it would be transacting other people's business for mere accommodation.]

Since one of the chief functions of a bank of deposit, and such was the nature of the one at Williston, is that of caring for the money of its patron-depositors, it seems important that further practical information may be profitably given here. Let us consider this under a few general facts.

First: In an important suit at law* the Judge said: "A bank is not bound to receive on deposit, or to keep, the funds of every man who offers money for that purpose. It may select its dealers, and refuse such as it pleases. For the purpose of this selection the cashier appears to be the proper officer."

Second: Mr. Justice Davis has rendered an important decision involving the relation between banks and their depositors† in which he says: "It is an important part of the business of banking to receive deposits, but when they are received, unless there are stipulations to the contrary, they belong to the bank, become part of its general funds, and can be loaned by it as other moneys. The banker is accountable for the deposits as a debtor, and he agrees to discharge these debts by honoring [Paying the amount of a check in current funds when properly presented for that purpose is "honoring it."] the checks which the depositors shall from time to time draw on him." This relation does not prevent the bank, however, from acting as a trustee, factor or agent for a depositor, but when it so acts it must be upon a definite agreement and the bank must obey the directions of the depositor as to the use or investment of his money.

*Thatcher *vs.* Bank of State of N. Y., 5 Sanf. p. 130.

† Bank of the Republic *vs.* Millard, 10 Wall, 152.

Third: As the holder of a check on a bank you have no interest in the money of the depositor until the bank upon which the check is drawn promises or signifies in some way its willingness to pay you. You cannot in law compel the bank to pay you should it decline to do so, and you have, as the court would say, no cause for action against the bank. A gentleman in Massachusetts brought suit against a bank claiming as the holder of the check he was a creditor of the bank in which the maker of the check had deposited the money. But Judge Gray* did not agree with him, for he said: "The bankers agree with their customer to receive his deposits, to account with him for them, to repay them to him on demand, and to honor his checks to the amount for which they are accountable to him when the checks are presented; and for any breach of that agreement they are liable to an action by him. But the money deposited becomes the absolute money of the bankers, impressed with no trust, and which they may dispose of at their pleasure, subject only to their personal obligation to the depositor to pay an equivalent sum upon his demand or order. The right of the bankers to use the money for their own benefit is the very consideration for their promise to the depositor. They make no agreement with the holders of his checks."

Should a bank then, refuse to honor a check which you present you must look to the maker of the check or to the endorser who has given it to you for its payment. It is clearly the duty of the bank to pay a check when properly presented it having the funds of the maker sufficient to pay with, and it will invariably do so except for good cause. The maker of a check after having issued it may reconsider his act and instruct the bank not to pay. This he has a right to do. But it is also true that he must not do so except for the best of reasons; for, says Judge Taylor:† "All the learned authorities and judges speaking upon the subject say that it is a fraud on the part of the drawer of the check to make the same when he knows he has no credit or fund to draw upon, and that it is equally a fraud, as between him and the person to whom he gives the check for value, to withdraw the fund or credit before the check is presented for payment."

* Carr *vs.* National Security Bank, 107 Mass. 45.

† Pease *vs.* Lauderner 22 N. W. R. 847. Supreme Court of Wis.

[The courts in Illinois have decided that the holder of a check may sue the bank on which it is drawn, and recover if the bank at the time the check is presented has sufficient funds of the maker to pay with.]

Returning now to the little gathering in the cheerful banking-room, where a few of the directors had called to exchange congratulations upon the pleasing prospects of the institution, we see our young bank-president hastening to the side door where he had heard a loud rapping by some one desiring admission. Opening the door he met one of the village boys who handed him an envelope with a flourish and an air of importance and then sped rapidly away, saying as he turned on his heel :

"It's all right, Mr. Vangrift, the girl what sent me down here gimme a quarter."

This is the message Albert found inside :

HOTEL, 4 P. M.

TO MR. ALBERT VANGRIFT :

Please come to the hotel as soon as you can leave your office conveniently. I have something important to tell you. Papa will be here at that time probably. Come and dine with us. ANNIE CROSBY.

CHAPTER X.

PLANNING FOR THE RAILROAD.

"I want two thousand dollars for it."

"Is that the least you will take ?"

"That is only twenty-five dollars an acre and I consider it worth more ; but I must sell even at a sacrifice."

"And what are the terms ?"

"I will accept one fourth cash and the balance on time, at six per cent."

"Five hundred down and fifteen hundred, say in one year ?"

"That's all right ; you can make it in a mortgage or an endorsed note as you prefer."

"I will decide, and have the deed made before three o'clock."

"I will call then at two. Good morning."

"Good morning, Mr. Wingate."

These were the closing words of a conversation involving the purchase by the young bank-president of eighty acres of fine land adjoining the village of Williston.

"How did you learn, Albert, that Mr. Wingate wanted to sell the land ?" asked William Warrington after the two had discussed the propriety of the purchase, which Mr. Warrington pronounced an exceptional bargain.

"Indeed I should have known nothing of it except for Miss Crosby who heard Mrs. Wingate speaking of it at the hotel the other day. Miss Crosby got an idea of the land and that it was a favorable bargain, so she sent for me to inform me and also advised me to purchase it."

"She is rather an extraordinary girl," said Warrington ; "I dare say she saw that if your railroad scheme should work that land within a year would be worth many times the price you were to pay."

"Probably ; and I am looking to that possibility ; were it not for my perfect faith in the undertaking I should hardly have cared to purchase the property."

"It's strange, though," suggested Warrington, "that we have heard nothing from father. He was to urge Mr. Wharton to be as prompt as possible in deciding what he would do, and in learning what could be done among his friends. But here's Jop with the mail — there may be something from Philadelphia."

"So there is," said Albert, glancing over the package of letters brought in by the porter. "But this isn't your father's writing, is it ?" holding up to Warrington's observation a large envelope addressed in a strong merchant-like hand.

"Why no, surely. I don't know whose writing that is."

"Well, let us find out," said Albert, breaking the seal, and commencing to read :

PHILADELPHIA, *June* 9.

MR. ALBERT VANGRIFT :

The subject of our conversation while you were in Philadelphia has had my further consideration, and I am inclined to look with still more favor upon the undertaking. Mr. Warrington signifies a willingness to join me. When we are fully satisfied about the project some friends in New York and others in Boston will become more actively interested. We have decided to order a preliminary survey of the route as proposed by you, and have instructed engineers to proceed at once to Williston and to report there to you for orders. We want your services, so far as you can spare the time, for which you shall be suitably paid.

For all necessary disbursements draw on me or present your account when you come to Philadelphia.

Faithfully yours,

EZRA WHARTON.

"Nothing could be better than that," said Warrington, eagerly. "I now look upon the railroad as a certainty. I know Mr. Wharton, and from the number of successful enterprises he has inaugurated I feel sanguine that he will see this one through. Father joins him, and that is an additional assurance that more is really decided upon than appears. Something, of course, will depend upon the report of the engineers who make the preliminary survey."

[A preliminary survey made by civil engineers furnishes information upon many important facts to be considered in undertaking the construction of a railroad. It notes the appropriate length of the route, its best course, the probable cost per mile, etc. The engineers, with their instruments, go over a number of possible routes, estimating upon each the cost of bridges, "cuts," "fills" trestles and the general road bed. From the surveys a map delineating the country along the various possible routes is drawn and a detailed statement prepared showing the necessary work upon each. From this the projectors of the road are able to decide which of the several routes is best.]

Now came an important time in young Vangrift's history. He must decide without delay upon some course to pursue. If the road was to be built the promoters of the enterprise, he knew, would demand a large amount of aid from the county, and from every county through which the road would pass. His own county would be required to furnish bonds to the amount of a hundred thousand dollars, at least. For these bonds there would be given an equivalent in the stock of the company. Should the enterprise succeed something would eventually be received from sale of the stock, but, if it should prove a failure, the county would be burdened with a heavy debt and still no advantage secured. Could he consistently urge his friends, and the people of the county, to give so much aid? This was a question that troubled him, and he decided to get together a number of his intimate friends, men of means and influence, before whom he could lay the subject and obtain an expression of their opinion.

This he quietly accomplished. But the meeting was not altogether harmonious. Some were hopeful and confident, others doubtful and conservative. No satisfactory conclusion could be reached. The meeting adjourned to meet again a week later, and at that time still again to a more distant period. At last and while the little company of business men were from time to time holding their private conferences, and discussing the great project in all its phases, probabilities and possibilities, there came word from the projectors of the scheme saying the preliminary survey for the road had been completed, and it was now necessary for the county to decide whether or not it would encourage the undertaking by voting bonds to the amount of a hundred thousand dollars. "If the three counties through which the road will run," said the carefully-worded instrument of writing which came in the shape of a proposition, "will each subscribe for one hundred thousand dollars of the stock in exchange for county bonds to that amount we propose to commence the road and complete it as rapidly as possible."

Since the day Albert had asked his friends of the village to meet and discuss this subject several months had elapsed. During all this time he had been energetically at work. He had watched the operations of the engineers in their work, not only in the county where his greatest interests lay, but throughout the extent of the line. Several visits had he made to Philadelphia, and others to New York and to Boston. His duties at the bank had not been neglected. As often as possible he had attended the gatherings of his friends in their quiet discussions over his fond scheme. Now came the time for action.

"I, for one," said he at the gathering of the merchants and business men when the proposition was read to them, "am in favor of our county voting bonds, and shall do what I can to secure an election for the purpose of voting upon the question. When that election takes place I shall make every honorable effort to secure the adoption of the question favoring aid to the railroad! Our county needs the railroad! I believe it is the only means we have for securing the advantage, and if we turn a cold shoulder now it will be many months, if not, indeed, years, before we are offered another opportunity!"

This little speech had a good effect. Some who had been only half inclined to favor the proposition now heartily endorsed it. Those who favored it before became enthusiastic, and those who had obstinately opposed the plan grew less demonstrative in their objections.

In the gathering were all the influential men of the village and with them a number of the most prominent farmers living in the immediate vicinity. A vote was taken and it was decided by a good majority to call an election; at least, that a petition asking for an election to be called should be presented to the county commissioners.

Following the call for an election came the work of canvassing the county and discussing the question with the country-folk many of whom, it was known, were decidedly opposed to "burdening the county with debt" as they called it. The larger part of this work fell to the influence and persuasion of the young bank-president.

As the time for the election approached and the conservatives were hard at work with discouraging reports and arguments, young Vangrift conceived the idea of holding a public meeting in the town hall where an open discussion could be participated in, and where all who desired might hear the arguments upon both sides. To this he proposed inviting the wives and daughters as well as the fathers and sons, and there in the face of the public should the opposition present the strongest arguments would he frankly abandon his course —and oppose the proposed aid.

This idea was heartily seconded by the strongest advocates upon both sides, and a day was named for the meeting.

(TO BE CONTINUED.)

SOME SUCCESSFUL WOMEN.

By Sarah K. Bolton.

VIII.

RACHEL LITTLER BODLEY.

(A friend of Dr. Bodley has kindly furnished me with the following sketch. —S. K. B.)

THE roll of Successful Women would not be complete without the name of Prof. Rachel Littler Bodley, A. M., M. D., Dean of the Woman's Medical College of Pennsylvania. She has not reached the position she occupies without meeting difficulties and surmounting obstacles; her story is a record of heroic efforts, untiring industry, unselfish devotion.

Prof. Bodley was born in Cincinnati, Ohio. Her paternal ancestry was Scotch-Irish, the American progenitor, Thomas Bodley, having emigrated from the north of Ireland in the first quarter of the eighteenth century, and settled in what is now Montgomery County, Pennsylvania. There he married Mrs. Eliza Knox (*née* McIntosh) from Edinburgh, Scotland; the eleventh president of the United States was a direct descendant of this widow. William, the eldest son of Thomas and Eliza Bodley, was the great-grandfather of Prof. Bodley; he was a soldier in the Continental army, and during the terrible winter of 1777–78 was with General Washington at Valley-Forge, where he ranked as Major; he contracted consumption from exposure in the service, and died in 1780. His grave, with its gray lichened headstone in a state of excellent preservation, is in the churchyard of Providence Meeting House not far from Norristown, Pa. Standing by its side the eye takes in a far-reaching landscape of marvellous beauty, the distant hills about Valley-Forge being distinctly visible.

The maternal ancestor was John Talbott, an English Friend who emigrated to the Colony of Virginia and was the progenitor of a large family who through two succeeding centuries have honored their name and lineage. Rebecca Wilson Talbott and Anthony Richard Bodley, the parents of Rachel Littler Bodley, went to Ohio early in the present century. Rebecca, the Quakeress, the only daughter of Samuel and Rachel Littler Talbott, crossed the Alleghany Mountains in an emigrant wagon, being one of a family of five young children who were taken by their parents from the old home near Winchester, Virginia, to the far West which in 1806 was on the banks of the Monongahala in Western Pennslyvania. A few years later, the Virginia emigrants moved into the adjoining

State and eventually the whole family embarked in an "ark" constructed by the eldest son, and descended the Ohio River, landing at the town of Cincinnati in May, 1817.

Anthony Bodley at twenty-one set out from Montgomery County, Penn., to seek his fortune, and crossed the mountains on foot; from Pittsburg he descended the river in a canoe or skiff, reaching Cincinnati about the same time as the Talbott family.

Five children were born to Anthony and Rebecca Bodley, of whom Rachel was the elder daughter and the third child. The education and training of the children devolved upon the mother. This pious and devoted woman dedicated her little daughter to the Lord, and chiefly to her influence and teaching is due the strength and excellence of character exemplified in her child. The daughter never forgot the consecration, and her life has been one of steadfast obedience to her mother's injunction written in a birth-day album: "Make everything subservient to the high aim of pleasing the great I AM, lean on Him, lean on no earthly stay: your strength, your sufficiency is in Jesus alone."

Mrs. Bodley opened a private school in Cincinnati, and in this school Rachel was a pupil until her twelfth year. Both mother and daughter believed that the best education and the broadest culture were means to the greatest usefulness; hence even the fragments of time were improved to secure a liberal education, and to this end Rachel entered the Wesleyan Female College of Cincinnati in 1844. This institution, the first chartered college for women in the United States, and hence, in the world, was founded in 1842 for the purpose of giving to women a higher education than the existing schools and seminaries afforded. This college which, for the first seventeen years of its history, was under the presidency of Rev. P. B. Wilber, has enriched society with women of a noble type. While the intellect was under training, especial attention was given to the education of the moral powers. The conscience was carefully cultivated, hence its graduates have been to a remarkable degree the foremost Christian laborers in church and charitable work in their respective communities.

Here, in her school-course of five years, everything required of Rachel Bodley was well done, and in all that she attempted the highest standard was reached; especially was it soon evident in her duties pertaining to the college literary society that she was endowed with the "gift of writing." It is not always that persons of the finest mental powers and of studious habits are the most genial companions; but in the case of Miss Bodley, to her literary taste and skill was added a warm heart overflowing with affection and sympathy, prompting her to deeds which endeared her then and forever to the discouraged class-mate and the homesick schoolgirl.

Immediately after graduation in 1849, Miss Bodley was appointed to an assistant teacher's place in the faculty of her Alma Mater, and here she remained ascending in grade, till 1860, when she was Preceptress in the Higher Collegiate studies. To say she was a good teacher were too tame and spiritless an expression to use in referring to one so thoroughly prepared, so in love with her work.

Her rare power in winning the hearts of her pupils, gave her unusual influence over their minds, and thus mutually loving and being loved, they taught and learned with an enthusiasm which robbed study of its tedium, begat a hunger and thirst for knowledge, and made the school-room a place of delight. Not content with explaining the lessons of the text-books, she felt responsible for the moral development of her pupils, and made time to close each week's duties with special religious instruction. It is the testimony of many of her pupils of those early years that these lessons given in such an unobtrusive manner made a lasting impression, and that the example of Christian character before them daily became their highest model in maturer years.

Notwithstanding her success through these eleven years as a teacher, Rachel Bodley was not satisfied with her attainments. Hence to gratify a worthy ambition and to qualify herself for still greater usefulness, she left home in the autumn of 1860 for Philadelphia to become a special student in advanced chemistry and physics in the Polytechnic College of Pennsylvania, at that time the leading institution of the country for instruction in the applied sciences; and of practical anatomy and physiology in the Woman's Medical College of Pennsylvania. After a year of close application and of rich acquirement, she returned home, and in February, 1862, was appointed Professor of Natural Sciences in the Cincinnati Female Seminary, which position she occupied three years.

During this time she made a valuable contribution to local botanical science in the shape of a catalogue of plants. Joseph Clark, a native of Scotland, but for the last thirty-five years of his life a resident of Cincinnati, died in 1858; he was a lover of nature and an indefatigable collector of specimens of natural history. After his death his extensive collections came into the Cincinnati Female Seminary. We will let Prof. Bodley tell what she did in an extract from the preface of this attractive catalogue of forty-eight pages :



DR. RACHEL LITTLER BODLEY.

When I entered the seminary in 1862, I found chaos reigning in the domain of science. In the midst of abounding wealth famine was inevitable through lack of classification. With a resolute will I entered single-handed upon the Herculean task of making these treasures available to science. No attempt at classification according to the natural system had been made. The plants for the most part had been named, but named according to the nomenclature of thirty years ago. Hence the necessity for a careful study of synonyms and a critical and laborious examination of individual specimens for the purpose of effecting the numerous nomenclatural changes which the advance of science rendered necessary.

The American plants have been classified according to the natural system as published by Prof. Gray in his "Manual of the Botany of the Northern United States," revised edition 1857, and by Dr. Chapman in his "Flora of the Southern United States, 1860." There were also foreign plants, British ferns and mosses, packages of plants from New Zealand. In the absence of any reliable manual which embraced the countries represented by these plants they were classified as far as orders and genera with Lindley's Vegetable Kingdom as my guide. The mass was carefully opened, the plants identified and finally arranged in labelled sheets of uniform size, and the whole placed in a convenient herbarium case, where it is now in complete readiness for reference and study. During these years I have labored patiently and faithfully upon it in my leisure hours, and it is only now in my fourth summer vacation that I have finished the classification and arrangement of this herbarium. I have found my work womanly, secluded, ennobling; and I submit to educated women of this vicinity whether, since these pursuits fail through lack of patronage, they may not enter upon them, and, as they find opportunity, become workers in, or patronesses of science. Only the will is lacking; cultivated talent, wealth, and opportunity are abundant.

The preparation of this catalogue received the commendation of so experienced and critical a judge as Dr. Asa Gray, the highest authority upon botany in the United States. "Your attempt is very satisfactory indeed," kindly wrote the great botanist, "and much I know must have depended upon your good taste and knowledge. I see but very few misprints, and the arrangement is wholly pleasing to the eye."

In 1865, Rachel Bodley was called to the chair of chemistry and toxicology, in the Woman's Medical College of Pennsylvania. She accepted and thus became the first woman-professor of chemistry on record; and here, after more than twenty years of arduous labor, she still toils inspiring students, serving humanity, and honoring God. In January, 1847, she was elected Dean of the Faculty, since which time she has given herself, time, talents, and strength wholly to the college, promoting its interests, striving in every way to benefit and elevate her sex, and to secure for woman and her work the recognition and respect which they deserve.

The industry whose results have been partially shown, has been truly marvelous. Although Prof. Bodley graduated, she has never finished her course of study. While teaching in Cincinnati she was still pursuing her studies under the best masters. Her college course had been a thorough classical one, including also mathematics and two modern languages, but throughout the eleven years this mental acquirement was systematically and statedly supplemented with private lessons in higher mathematics, music, French, German, elocution, drawing, microscopy and phonography.

These subjects alternated with each other usually only one subject being pursued at a time; when these self-imposed tasks were challenged by her friends, the young teacher was accustomed to defend them by saying that they kept her "out of the ruts" and imparted good quality to her own teaching. From this extended and critical study of standard French and German authors, the transition to text-books was easy and natural when the time came for her to devote herself to natural science. Through sight-reading she has without effort been able to keep abreast with the latest phases of scientific thought on the continent, without the marring and the delay incident to published translations. After Prof. Bodley had taken up her residence in an Eastern city the same habit of daily application enabled her to pursue the regular course of medical study begun in 1860, and to complete it while fulfilling the duties of her chair in lecture room and in laboratory.

Her summer vacations constitute the only leisure the laborious life of Prof. Bodley has ever permitted. The vacation trip was carefully planned months before it occurred and usually comprehended long journeys, never hotel residence except during brief pauses for needful rest. In this way throughout the decades, this American woman, loyal in her recreations as in her labors, has visited every typical locality whose natural scenery or historic associations invite attention, from the Great Lakes to the Gulf of Mexico, and from the Atlantic Ocean to the Rocky Mountains.

Beginning as a little girl with the encircling hills of the beautiful queen city of her birth, which hid from her view the great world which she longed to explore, her earliest journey beyond them was made one summer day when the wise mother transported her entire little brood of four, on the wonderful railway (the Little Miami) then in process of construction and which terminated in the fields about thirty miles from Cincinnati; the little party pushed on by stage to Green County, their destination being the "cliffs of the Little Miami River." This for the children was their first "scenery" and the happy day spent in the miniature canyon was never forgotten; of the "four" it was Rachel's soul that was filled with reverent awe and speechless delight. The impending rocks, the unfamiliar, sombre evergreens and the falling waters reappeared in her day-dreams again and again long after she had returned to her school tasks. The next great revelation was Niagara some years later, the next Mammoth Cave, the next the Great Lakes, the tour planned to end at the head of Lake Superior as to the steamer, and the crossing to the head waters of the Mississippi River to be made by canoe and afoot. Her elder brother was her congenial travelling companion and the attempt to carry out the programme was resolute, but failed finally, through inability to obtain reliable guides. The attempt was renewed two years later when with her younger brother as fellow traveller, the long trip by steamer from Cincinnati to St. Paul was accomplished at the "Fuller House" and the party was booked for Lake Superior; the first stage of the land journey was actually made, but the arrival of a party of half-breeds at the first station who had just come over the route to be taken, compelled the enthusiastic tourists to desist from their purpose. These trappers reported the streams and little lakes overflowing from recent rains and the numerous portages utterly unsafe to be undertaken by a lady. Sixteen years later the same lady, this time alone, entered the harbor of Duluth on a magnificent steamer and, after a late breakfast in a first-class hotel, began the ascent of the St. Louis River seated in a luxurious railway car; onward sped the train, the names of stations as gleaned from railway guide recalling the careful study of the portage route, which was to have consumed many days. In the late afternoon of the glorious midsummer day the train rolled into the stately city of St. Paul and the dream of years was fulfilled! The transit from the greatest lake to the greatest river of the continent had been made, but the glamour was gone, the steam passage had proved destitute of poetic elements, *the dear brothers were both dead.*

Previous to her election as Dean, Prof. Bodley accepted invitations to teach or lecture during time which was unoccupied by the duties of her professorship; she was thus occupied in the summer of 1866 at Flushing, Long Island; 1867 and 1868, in Philadelphia; in the spring of 1869 she delivered a course of lectures in Cincinnati to which leading physicians and teachers listened with interest and profit. Five seasons, 1870–1874 inclusive, she gave instruction in Howland school, Cayuga Lake, N. Y.

Prof. Bodley came to the deanship when a new college building was in progress, the corner stone of which was laid in 1874, and possession taken in March, 1875. The number of students then in attendance was seventy; during the present annual session (1886–87) this number is one hundred and and fifty-five. The duties of the new position added to those of her chair left no time for stated outside work, her official letters alone gradually increasing to a correspondence which now encircles the globe and continues throughout the year. By means of these letters she has wielded a world-wide influence for good in addition to what she has achieved by personal contact. In recent years one of the most notable events connected with Dean Bodley's work has been the delivery of an address to the graduates at the Commencement in March, 1881, entitled "The College Story." No less distinguished an authority than Mr. Thomas Wentworth Higginson in the *Woman's Journal* characterized this address as "the first really good and careful collection of facts I have ever seen bearing on the professional life of woman. It relates to the medical profession, the only one yet open to women on a sufficiently large scale to make facts of much value, except the profession of teaching which involves in some respects a different set of conditions, and need not now be considered. But medical practice is essentially professional life, and Dr. Rachel L. Bodley, Dean of the Woman's Medical College of Pennsylvania, has lately instituted, among the two hundred and seventy-six graduates, a series of inquiries bearing on their whole public life for the thirty years since the first class graduated. The care with which the facts were obtained, and the clearness with which they are stated, give them a value almost unique."

Among the thirty-three graduates of the class of 1886 was a Brahmin lady of high caste from India. Already well educated when she came she pursued the course of medical study for three years. The previous history of Dr. Anandibai Joshee, her coming to America, her progress and success, had been a perpetual source of interest to those acquainted with her presence in the college. In anticipation of the memorable event of the graduation of this Brahmin lady, Dean Bodley extended an invitation to her distinguished kinswoman then in England, Pundita Ramabai Sarasvati, scholar, lecturer and poet of India, to visit Philadelphia as her guest. The Pundita came, accompanied by her little daughter of five years, and in the American Academy of Music in the presence of a vast audience she witnessed on Commencement Day with full heart, the conferring of the degree of Doctor of Medicine upon her Hindu sister. The next evening a formal reception was given the two distinguished ladies in the parlor of Association Hall, the guests being ladies to the number of about one hundred who represented every department of woman's work in Philadelphia, educational, charitable, philanthropic and reformatory. Dean Bodley received the guests and introduced them to the Brahmin ladies; later, in the hall she delivered the public words of welcome to the Pundita and at its close presented the renowned stranger to a large audience of ladies and gentlemen who had assembled to listen while she addressed them on "The Women of India." The events of the two days engaged public attention to an unlooked-for degree and in response to this fact and that the interest in these lovely and gifted representatives of India might be fostered, Dean Bodley, early in April following, prepared a dainty little pamphlet entitled "The Welcome to Pundita Ramabai," which was a complete record of the two events — the graduation of Dr. Joshee, and the Welcome at Association Hall. This little missive was widely distributed throughout America and Asia; its compiler taking especial pains to obtain from the Hindu ladies the postal address of their relatives and friends that she might send it by mail to as many as might thus be reached in India. Contact with Western civilization on the part of both, and Christian baptism as regarded Ramabai, had made them outcasts among their kindred, but it was desired that in the land of their birth it might be known that American women cherished and loved them. Out of the half-dozen copies mailed to England, one was proffered for the acceptance of Her Majesty the Queen, Empress of India, through the good office of the Legation of the United States. The correspondence of the dean was enriched, and the summer rendered memorable in her life by a prompt response from Windsor Castle, written by the Queen's private secretary, Sir General Henry F. Ponsonby. By command of the Queen thanks were returned for "having sent her majesty the account of Dr. Joshee's reception in the Woman's Medical Col-

lege of Pennsylvania" and the assurance added that "the Queen has read the paper with much interest."

Queen Victoria's acknowledgment is of no small importance to the development of woman's medical work in India, and her recognition of one of her Hindu subjects by her medical title is of great significance; all who in India are working for the elevation of women will thank the dean for thus calling the attention of her majesty to the subject.

Other honors beside those already enumerated have been conferred upon Dr. Bodley in acknowledgment of her contributions to literature and science and indicating the esteem in which her work and herself as a woman are held. In 1864 she was elected a corresponding member of the State Historical Society of Wisconsin; in 1871 elected a member of the Academy of Natural Sciences of Philadelphia. In 1871, the degree of A. M. (*Artium Magister*) was conferred by her Alma Mater in Cincinnati. This institution, up to this time, had never given a degree to any of its alumnæ subsequent to the A. B. at graduation. At the College Commencement of 1871, three of its alumnæ were selected upon whom to confer the first honor of the kind, of which trio Prof. Bodley was one.

In 1879 the degree of M. D. was conferred by the Woman's Medical College of Pennsylvania. In 1873 she was elected a corresponding member of the Cincinnati Society of Natural History; in 1876, a corresponding member of the New York Academy of Sciences, and during the same year a member of The American Chemical Society located in New York City. Early in 1874 it was proposed in the columns of *The American Chemist* to celebrate the centennial of chemistry in August of that year, this date being chosen in honor of the discovery of oxygen by Dr. Joseph Priestley in August, 1774; suggestions as to methods and place were solicited. Prof. Bodley had only the year previous made a pilgrimage to the grave of Dr. Priestley at Northumberland. And she proposed that the Centennial gathering be held at that place. It was her suggestion which determined the location of the meeting and accordingly "a reunion of American chemists for mutual exchange of ideas and observations" was held, whose proceedings fill a volume of over two hundred pages, and at which Prof. Bodley was elected first Vice-President, and was the only lady upon whom such honor was conferred. In 1880 she was elected a member of the venerable Franklin Institute of Philadelphia; in the winter following she was invited to deliver six of the lectures of the regular course of the institute, which she did, taking for her subject "Household Chemistry."

In January, 1882, she was chosen a member of the Public Educational Society of Philadelphia, and in February was elected School Director of the twenty-ninth School Section of Philadelphia, in which capacity she served acceptably for three years. In 1883 she was appointed one of seven women visitors to assist the Board of Public Charities of the State of Pennsylvania in visiting and inspecting such institutions in the county of Philadelphia as came under their supervision.

It is not too much to say that every year since her residence in Philadelphia Dr. Bodley's influence has grown stronger and been more perceptible, but it has not been limited to that city; it has become world-wide through those who have carried away with them her helpful instructions and her healthful spirit. The elements of her success have not all been peculiar to herself, but have simply been appreciated and improved. Some of these have been good health, acute powers of observation, a refined and modest manner, carefulness in details, the neglect of which so often causes the failure of great projects, a systematic division of time, and an orderly arrangement of material.

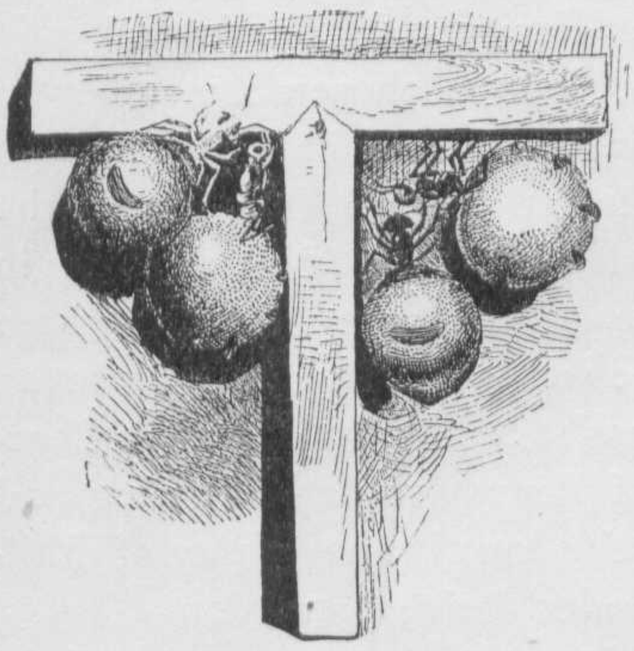
For some years she has been the head of a modest but sunny home in the vicinity of the college building, whose central figure is her aged mother who, having finished her work, awaits tranquilly by her daughter's side the summons to "come up higher." Here in her own home the Dean each autumn holds a reception in honor of the incoming college class and here throughout the year come and go those from near and from far who are busy about the world's work.

WONDER-WINGS, MULLINGONGS, COLOSSI, AND OTHERS.

By C. F. Holder.

VIII.

ANIMALS AND THEIR FRIENDS.



LIVING HONEY-BOTTLES.

THAT the lower animals have their special friends, or show preferences as to their companions, no observer cannot doubt. In some cases the friendship is between two of the same tribe; again we find what are generally considered the most antagonistic forms united in bonds of good-fellowship, and we see acts of devotion and self-sacrifice that are almost identical with those that characterize the friendships of human beings. It is needless to say that the impulses are much the same in all; some professing an interest that is actuated entirely by greed, or for personal ends, while in others it is unselfish.

Any one who has visited the herd of elephants owned by Mr. Barnum must have noticed the large dog that stood by the side of one of the huge pachyderms. To the visitor this might have seemed accidental; but the dog was always at its post by this particular animal. If the dog wandered off the elephant showed its distress immediately by attempting to follow; straining at the chain confined to its ponderous feet, or throwing aloft its trunk and uttering the shrill whistle indicative of alarm, and only resuming the monotonous swinging of the head when its companion returned. The elephant was often observed caressing the dog, and though the latter always slept in the straw, sometimes beneath its huge friend, it was never stepped upon or crushed. When the elephant was led out to go through its daily task in the ring, the dog would begin to bark and endeavor to join the throng of performers; so that it was perfectly evident that the friendship was mutual.

In many of the works of old writers are found instances of such attachments between man and beast. Ælian records a friendship between a little girl, who sold flowers in the streets of Antioch, and an elephant whom she was in the habit of feeding. One of the elephants in the Barnum herd exhibited great interest in a little daughter of one of the attendants; holding her upon its trunk, and in many ways showing its affection.

In India elephants are so trusted that they are sometimes employed as nurses, and have been seen carefully tending their charges, lifting them gently back when they were disposed to stray away. The natives state that these great animals have been known to die of a broken heart when deprived of a certain keeper, and Lieutenant Shipp, an English officer of extensive experience in the East, gives a minute account of an elephant that died in what was considered a fit of remorse after having killed its keeper.

While attachment between animals is everywhere to be seen, it is not often that we witness such acts of disinterested devotion as we expect among human beings. Mother-birds protect their young in the face of every danger; but it must be confessed that few observers have seen animals go to the rescue of others without maternal or paternal incentive; but such cases are not wanting.

Some years ago a Scotch naturalist wishing to obtain a gull fired at a flock, breaking the wing of one which came fluttering down, falling into the ocean. At first the flock were demoralized, and flew wildly about, uttering harsh cries; but a moment later they seemed to be recalled to a sense of duty by the struggles of their wounded comrade, and two birds darted down, seized it by the tips of its wings, then rose and bore it away in triumph; for, as may be supposed, the naturalist did not fire, but permitted the rescue. Here was friendship indeed; heroism, in fact, as the other birds alarmed by the fire faced the same danger.

I once formed the acquaintance of a monkey that pretended to be on terms of the greatest

friendship with a cat, the two being inseparable. When I first saw the former it sat on a shelf made for its comfort, holding the cat, that was purring loudly, tightly in its arms. Puss was in one sense a victim, and I am confident if I had tugged at her tail as her friend Jocko did I should have been rewarded after the fashion of cats; but she suffered the greatest indignities from his hands, and on one occasion only did I hear a cry of protest. She was released by Jacko, and leaped upon the shelf leaving her tail hanging down, when with a spring he seized it, and began to gyrate violently upon the living swing that uttered piteous howls in protest. But a moment later she was rubbing against him with every evidence of affection.

In the Museum of Natural History, Central Park, New York, there is a mounted African lion, the work of the celebrated Ferreaux of Paris. The noble animal is represented as on the alert with its mouth open, the teeth glistening, and the tail in a life-like position, as if caught in an attempted lash. Everything about this specimen betokens life and action, and just beneath its head lies a little black and white dog, gnawing a bone. The picture, for it is one, is simply that of a little dog eating its dinner guarded by a lion; and while it conveys little significance to the casual observer it is a representation of actual facts; the lion and dog being old friends who lived together in the Paris Garden. The lion was so attached to the dog that it would allow no one to touch it; shared its meals with it, in itself a remarkable act as any one can realize who has watched the ferocious struggles of these animals when feeding. But this little dog had in some way secured a hold upon the great cat's affections, and was preserved and protected until the end.

An exactly opposite case was seen at the New York Zoo some years ago, when the old dog Fan adopted and brought up a family of lions.

That friendship exists between insects is well known. Especially is this true among ants, and it is surprising how quickly these little creatures recognize the presence of an intruder. At Colorado Springs the surrounding country is marked in a very noticeable manner by the ant-hills, some of which are a foot or more in height. I often visited them, and spent considerable time in watching the methods and habits of their inhabitants. If a stick was thrust into a large nest thousands of ants would rush out to the attack, and their numbers in a single nest may be realized when I say that I have swept them back with a bit of weed so that they formed at the bottom of the pit a solid mass almost as large as my closed hand. Such a ball must represent many thousands, yet all are friends or acquaintances. It is said that Napoleon knew all his soldiers, but here are ants that undoubtedly have less to distinguish them than human beings, that recognize untold thousands constituting their tribe.

That this is so I have often demonstrated by dropping among them an ant to all intents and purposes alive, but from another nest. The recognition of a stranger is immediate, and the intruder is at once attacked and either killed or driven out. In a nest near my house the ants from frequent visitations became extremely savage and would at once attack a new-comer. One day I dropped a huge iron-jawed black ant in among them. In a second it was seized by legs and antennæ by as many of the furious host as could crowd about. At first the giant struggled, then finding escape impossible he began leisurely destroying his tormentors, every movement of the ponderous jaws resulting in the decapitation of a victim, until finally he actually secured his release.

As in nests of *Formica pratensis* it has been estimated that there are often half a million individuals, it is evident that the memory of the ant is remarkable. Some interesting experiments may be tried to prove that friendship exists between ants and that old acquaintances are not forgotten. If an ant from a certain nest is taken away and kept for a day or so and then dropped among the rest with a stranger it is not molested, but the stranger will be found soon after badly used if not dead.

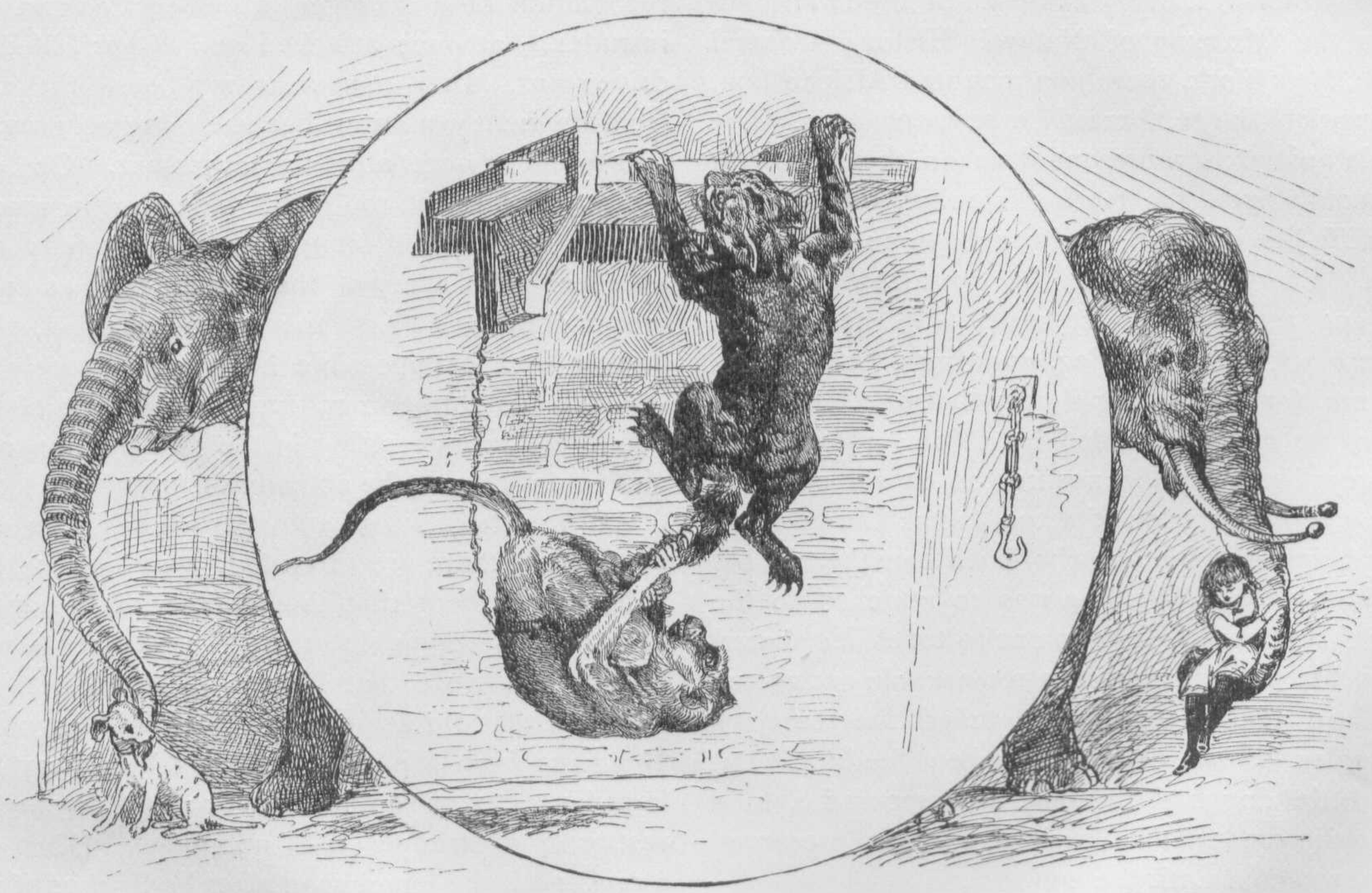
The length of time that ants will remember friends has been determined in an interesting series of experiments by Sir John Lubbock. In August, 1875, he separated a colony of *Formica fusca* which he had kept for some time. Eight months later he took one of the ants and a stranger and placed them in the old colony. The long-absent ant seemed perfectly at home and was not disturbed, while the other was immediately attacked. Ten months after the original separation he returned another old friend and a stranger. The latter was at once seized by the antennæ and

dragged from the nest while the former was not molested, though it was noticed that it did not mingle freely with the family. This experiment was repeated many times, the returned ant being marked with paint so as to be distinguished, and not only was it unmolested, but its old acquaintances insisted upon removing the paint. Sir John concludes his experiments with the following:

> Friends were in most cases amicably received even after more than a year of separation; but while the strangers were invariably attacked and expelled the friends were not always recognized, at least at first. It seemed as if some of the ants had forgotten them or perhaps the young ones did not recognize them. Even, however, when the friends were at first attacked the aggressors soon seemed to discover their mistake, and friends were never ultimately driven out of the nest. This recognition of old friends after a separation of more than a year seems to me very remarkable.

In some nests of the yellow ant as many as five species of *Aphis* have been found, and Märkel, a careful observer, states that in a large ant's nest (*Formica rufa*) there may be at least a thousand other insects living there as visiting friends unmolested by the rightful owners. André gives a list of five hundred and eighty-four insects found habitually associating with ants, five hundred and forty-two of which were beetles. That a friendship or association of some kind exists between this horde and the ants there can be no doubt, as the ants pay no attention to them, and just what this relationship is will form an interesting study for my young readers.

It is evident at the onset that different insects are on different footings. Thus while the *Aphidæ* are carefully tended by the ants, an insect allied to *Podura* is often found in the galleries darting about, bustling here and there, walking over the



GOOD FRIENDS.

ants with a daring recklessness, its antennæ vibrating as if with the most intense excitement; yet to this busybody the ants pay not the slightest attention. Perhaps they know that it is harmless, for *Beckia*, as Sir John Lubbock has named it, has paid dearly for its subterranean life and is blind.

Another blind friend of the ants is the beetle, *Claviger*, and not only is it sightless, but it seems to have entirely lost the power of caring for itself, and is even fed by the ants; and that they entertain some affection for the helpless creature is

very evident, as they are often seen caressing it with their antennæ.

It is barely possible that these attentions of the ants are not so disinterested as one might suppose, as if the two are watched the ants will occasionally be seen to lick certain tufts of hair at the base of the elytra of the beetle, evidently obtaining much satisfaction from the act, so possibly the blind insect provides them with nourishment of some kind. Ants have been seen licking tufts of hair on the beetle *Dinarda dentata*. On one occasion some ants were feeding upon sugar when a friend, the beetle *Lomechusa*, came along and tapped an ant upon the head with its antennæ—a gentle hint to share the delicacy, and it was at once taken, as the ant opened its mandibles and fed the beetle as it would one of its own tribe.

In no branch of the animal kingdom are there offered so many remarkable analogies to the acts of human beings as we find among the ants. Indeed this is so marked that Sir John Lubbock says:

> The anthropoid apes no doubt approach nearer to man in bodily structure than do any other animals, but when we consider the habits of ants, their social organization, their large communities and elaborate habitations, their roadways, their possession of domestic animals, and even in some cases of slaves, it must be admitted that they have a fair claim to rank next to man in point of intelligence.

I have referred especially to ants in this paper as they are available to all for study and observation, and while their structure and general features are well known, their domestic relations, their means of communication and social organization present an inexhaustible field for workers.

If evidence were wanting that certain ants voluntarily make sacrifices for others the case of the honey ant would be sufficient. That ants should keep domestic animals and perform the hundred and one intelligent acts that they do is remarkable, but that certain members of a tribe should either by election or selection constitute themselves actual living bottles or reservoirs for the rest seems beyond the range of possibility; yet such is the case. Many years ago a French naturalist, Mr. Wesmael, described a Mexican ant, *Myrmecocytus Mexicanus*, which was brought from Mexico by M. de Normann, making the remarkable announcement that in the division of labor certain ants were literally living honey-jars, or storehouses, for the others. This statement was deemed incredible at the time, but was confirmed by many observers as Lucas, Edwards, Saunders, Black, and others.

Two different generæ are now known: one *Camponotus inflatus* from Australia, and the one already given which ranges from Mexico up to Colorado Springs where in the Garden of the Gods they have been carefully studied by Dr. McCook. In this locality the nests of these ants may be observed as small elevations over the ridges of disintegrating rocks that form the characteristic of this wonderful garden. If we dig down, and with hammer or axe cut into the stone, we shall find in all probability among the swarm of ants several kinds and one remarkable for its enormously distended abdomen. This is one of the workers that by agreement, or in some way, has consented to hold a supply of food for the rest. These living bottles are kept by the other ants in a room by themselves, and are generally found clinging to the wall of their cell utterly helpless. Dr. McCook found by carefully watching them that these ants were chiefly night-workers, starting out in the evening about seven o'clock, and marching in lines to some low bushes in the vicinity. Examination showed that they were clustering about the small galls, formed by the gall-fly, *Cynips quercusmellariæ*, from which they obtained their honey. Each ant upon taking a supply returned to the nest and there delivered it up to the ants with the large abdomens who received it, holding it in bond, as it were, until wanted by the others. When the workers desired food they touched or caressed the living jars with their antennæ upon which it was produced by muscular contraction of the bottles and taken from their mouths by the hungry workers.

The nests contained on an average about two hundred of these honey-bearers, representing about one fourth of a pound of honey stored in this remarkable way. In Old Mexico strangers are sometimes presented at dessert with pellucid globes of honey to be eaten as we would eat a grape, the delicacy being the honey ant that is considered a *bonne-bouche* by the Mexican epicures. The honey is believed by natives to have medicinal virtues.

That such a condition of affairs in an ant's nest, showing so remarkable a division of labor, must entail a perfect understanding, no one can doubt, and probably these simple creatures have a language as effective as our own.

SEARCH-QUESTIONS IN GREEK HISTORY.

By Oscar Fay Adams.

VIII.

THE MACEDONIAN AND ROMAN CONQUESTS.

141. What Macedonian monarch was in his youth a hostage at Thebes?

142. What was the meaning of his boast that he had taken more cities with silver than with iron?

143. What was the Social War?

144. How did this war affect the Macedonian Power in Greece?

145. What important war raged in Greece in the same time as the Social War?

146. Name four of the most important results of the Sacred War.

147. What noted ovations were at this period directed against the Macedonian monarch and by whom?

148. What famous battle resulted in making Greece practically a Macedonian province?

149. What prince ascended the Macedonian throne in his twentieth year?

150. What cynic when visited by this king requested the king to stand out of his sunshine?

151. What orator committed suicide by taking poison from a reed and while surrounded by his enemies in a temple of Poseidon?

152. In what war was Athens defended against the Macedonians for more than six years?

153. What noted statesman revived the Achæan League?

154. How did the Ætolian League differ from the Achæan?

155. By whom were the Ætolians finally conquered?

156. What event terminated the Macedonian empire?

157. What event brought the entire Peloponnesus within the Achæan League?

158. How did the quarrel between Athens and Oropus finally affect the Achæan League?

159. What power did the Spartans appeal to against the Achæans?

160. What name did the whole of Greece finally receive?

ANSWERS TO MAY SEARCH-QUESTIONS.

101. The third Messenian War, because the Helots were joined by the Messenians who had already waged two wars with Sparta.

102. The help of the Athenians.

103. Cimon, the Athenian leader, not being able to vanquish the Helots was dismissed by the Spartans. This rendered him unpopular in Athens and the democratic or popular party, which headed by Pericles had opposed the war, now rose into power.

104. The long walls connecting the Piræus and Phalerum with Athens.

105. 445 B. C. between Athens and Sparta.

106. Thucydides.

107. The Parthenon.

108. The excessive tribute exacted by Athens. The transference of all public suits to Athens was another grievance.

109. Samos.

110. The quarrel between Corinth and Corcyra.

111. Phidias.

112. Aspasia.

113. The siege of Platæa by the Spartans, which continued for two years,

114. Cleon.

115. The blockade of Sphacteria, an island held by the Spartans.

116. Alcibiades.

117. At the Olympic Games.

118. 421 B. C. between the Athenians and Spartans. The duration of the peace was fixed for fifty years.

119. The Syracusans.

120. Demosthenes.



A YOUNG PRINCE OF COMMERCE.

By Selden R. Hopkins.

CHAPTER XI.

VOTING THE BONDS.

IT is autumn. The chilling winds go whistling through the village streets. Behind the crimson, the purple, and the yellow foliage that skirts and shades the western hills the low sun hides himself from view. Fast fall the shadows of evening upon the little community which, usually so quiet at this time of day, is now all aglow with life and excitement. The old town-hall in Court House Square is brilliantly lighted and presents a scene of interest such as in the village for many years has not been witnessed. This must be an unusual occasion.

With laughing, jolly, lively people, prancing horses and turning vehicles the streets are all agog. The centre of attraction is the old town-hall; and it is rapidly filling with ladies and gentlemen, town people and country folk, all eager for admission. Let us hasten thither and learn the cause of so much good feeling. Here a fiery team with a handsome carriage passes us as we approach the hall; it halts suddenly at the large front doors, and two gentlemen alight accompanied by two young ladies — Mr. William Warrington, Mr. Albert Vangrift, Miss Tama Vangrift, Miss Annie Crosby.

"Miss Crosby again in Williston!" ejaculates some society gossip.

Still the people are pouring in. Every seat is occupied, many are standing. Mr. Henry Harwood is addressing the audience upon the objects of the meeting.

"We have assembled," he says, "to discuss in a friendly spirit, and in perfect good humor, I trust, an important question before the people of this county — that of voting bonds in aid of a proposed railroad line." He makes a few appropriate remarks but, as he is only the chairman, he leaves all discussion for the speakers who are to address the assemblage.

The first speaker is a citizen of the place who favors the proposition. He proves himself well qualified for presenting the advantages to accrue from a railroad passing through the county, and warmly advocates the voting of bonds as a practical and reasonable measure.

An influential gentleman from a remote part of the county next takes the speaker's stand. He is opposed to granting subsidies to corporations. If the road can be made a profitable investment it will be built without aid; if it cannot be made profitable it will be abandoned.

Next, Mr. Waldo. He advocates voting the bonds. He shows how many of the evils attached to bond-voting may be overcome, and presents the importance of commercial credit and confidence. He adjures the people to rise above any personal feelings of distrust and begs them to believe that what benefits one part of the county benefits the whole county. The speech is well received and the speaker heartily cheered.

"Waitman," cries somebody in the audience, at which a stranger rises in the assemblage and proceeds to the speaker's desk.

This is a movement entirely unexpected by the advocates of the proposition. Mr. Waitman is a distinguished orator of New York, a lawyer by profession, and his services have been quietly secured to aid the anti-bond party upon this occasion. He shows at once his familiarity with the subject. He is argumentative, logical, forcible

and a ready wit. He tells anecdotes and creates great merriment. The distress of a debt-ridden community is vividly depicted. There was little probability that the road would be completed during the present generation. A careful estimate had been made showing how many hundred thousand dollars had been squandered on unfinished railroads, and how many of them would never be completed. But supposing this one should be completed and equipped; imagine the excessive charges for freight and fare every farmer would be obliged to pay should he use the railroad, while at the same time the bonds he was working to liquidate were locked up in the vaults of New York and Philadelphia capitalists! "Your fares," he said, "you must pay or be thrown off the train by an obstreperous conductor. There is no telling how many of your horses and cattle will be pitched from the track with broken necks by an ungovernable locomotive, while an idiotic engineer laughs at the disaster. . . . Think of the vast number of pumpkins the farmers of this county must dispose of to pay this debt of a hundred thousand dollars to bloated bond-holders. Not less than two million in number!"

The witty speaker had not half finished before the immense audience was in a frenzy of hilarity. They cheered vociferously upon every slight occasion and seemed almost delirious with laughter. The bond question appeared overwhelmingly defeated. Its staunch advocates looked glum and hopeless when amid deafening applause the orator left the stand.

Rising quietly the chairman looks at his watch and says:

"There is yet time for another speaker, if the advocates of the measure have one to occupy it."

A brief silence; then loud calls of "Vangrift! Vangrift! Vangrift!"

"Will Mr. Vangrift favor the people?" asked the chairman, following which came the cries of "Vangrift!" from all parts of the room.

The young bank-president rose in the central part of the audience. As he moved forward cheer upon cheer rent the air.

This was to him unexpected. He had doubted his ability to stand before a public gathering and had asked many of his friends not to call on him to address the meeting. But his friends had confidence in his fund of general knowledge and believed he possessed the qualities of a popular speaker should his courage prove sufficient to bear him out. Perfectly familiar with the subject had he grown during the past few months. He knew the projectors of the enterprise personally, could vouch for their honesty, personal uprightness, and business integrity. Besides, the young man, through his many noble qualities, and his rather romantic history, had endeared himself to the people of the county, and he was assured of a respectful hearing.

He steps upon the platform; his looks betray a nervous anxiety. Never before has he been placed in a position so trying. He approaches the speaker's stand. For a moment he falters. Rallying, he steps forward to address the audience, which has fallen into a profound silence. He assumes a jocular tone:

"What an extreme presumption for me to appear upon this platform! Have you paused, my good friends, to think of it? Do you not, my adherents, jeopardize our cause by urging me into this position? If so you believe, speak now before it is too late, and I shall come down from this exaltation with greater haste than I reached it. I appreciate the honor you have shown, and the confidence you have reposed in me, but if in what I shall attempt to say I injure our prospects you must charge not me with the ambition which defeats your hopes.

"The graphic language you have just listened to has untuned your appreciation of anything I shall be able to say. It is necessary, therefore, before I shall engage your attention, to ask that your highly-strung thoughts shall come down from the lofty pinnacle to which this modern Demosthenes has adroitly enticed them, to the level of ordinary speech, from the untrained tongue of a commoner.

"The gentleman has held before you an extravagant picture of communities swindled by scheming railroad projectors; but he has artfully neglected to produce in his panoramic essay the scenes of cities, counties, and towns, teeming with commercial life, humming with mechanical industry, and abounding in agricultural thrift — all the results of the co-operation of the iron horse. In pathetic tones has he portrayed the dire results of grievous debt, and in powerful argument has he warned you against the burden of an unnecessary

tax. Upon what, now, has he based all his reasoning and his prophetic appeal? Is it not upon the conjecture that this railroad will never be completed?

"Does he not tell you that the debt you create must be paid as a certainty while the benefits you are to reap are doubtful possibilities? How skilfully he has computed the number of pumpkins you must grow in order to liquidate this enormous debt! He imagines, it would seem, pumpkins to be the chief source of revenue in this county, and the only one our intelligence will permit us to cultivate!" (Cheers and "Good, good!") "May we not, my hearers, prudently inform the eloquent gentleman that while Massachusetts is not congenial to pumpkins, New York is celebrated for its abundant crop?" (Cheer upon cheer: "Hurrah for Vangrift!" "Go ahead, Albert!" were among the enthusiastic expressions from all parts of the house.)

"The learned orator did not refer to the advantages this railroad would create for the people of this county. He did not show how you could market your products without hauling them long distances over heavy roads, and at equally as good prices. Nor did he refer to the improvement in your social as well as commercial condition which must result from the building of factories and mills, thereby largely increasing our population and our wealth. These minor items he seems to have forgotten!

"Allow your thoughts, my fellow citizens, to rest for a few moments upon the manifold encouragements of railroads and telegraphs. Consider, if you will, how they stimulate human ingenuity; how they promote the welfare and facilitate the intercourse of communities and nations; how they spur into life the spirit of progress which fosters civilization, refines enjoyment, increases morality, encourages science, literature and the mechanic arts.

"And further, let me ask you to consider this fact: before these bonds must be paid, twenty years hence, this county will have quadrupled in population and wealth; I may even predict that it will have increased tenfold. Should the stock of this road become valuable, as I trust it may, little or none of the debt will ever fall upon this county; the interest we must pay, it is true, but that compared to our gain is a mere bagatelle.

"The projectors of this enterprise I know personally. I am proud to stand here as the champion of their good names. They are men of probity, progress, and stability. They are men worthy of your confidence. They will faithfully carry out every promise. They are men who never waver in the performance of a duty. If they use your money they will build the road. If the enterprise is profitable to them it will be equally so to you. Their demand for aid is just and reasonable — if granted they will perform their part of the proposition; if rejected the scheme will at once be abandoned."

At this juncture a gentleman in the audience arose from his seat and walking down the aisle to the front of the platform handed the speaker a small piece of paper. This young Vangrift hurriedly glanced over, and continued for a few moments the line of argument upon which he was engaged. Then holding out the pencil-written note, he continued:

"I hold in my hand an important suggestion. I know not its origin, but I will heartily endorse its wisdom. If adopted, as I believe it will be, I am confident it will prove an effectual protection to the tax-payers of the county, and ensure beyond cavil the completion of the railroad.

"This suggestion proposes that the bonds to be voted shall be held in trust by our county commissioners, and delivered by them to the railroad authorities in parts as the road is completed, so that by the time the road reaches the farther line of our county all the bonds will have been disposed of and not until then. This plan, if it meet the wishes of the tax-payers, I will see properly drawn and embodied in the proposition for the bonds, before the day of election. It is a prudent proposal, one that must meet the approval of our fellow citizens who, through want of confidence, stand in doubt upon this question.

"Ladies and gentlemen, I thank you for the attention with which you have listened to me."

Here followed another round of applause and cheer after cheer rang for some moments through the densely crowded hall. Young Vangrift had barely left the platform before a commanding figure familiar to almost every person in the county, stepped upon the stage. It was Judge Gray of the county court, a former member of Congress and a man of wealth.

"Ladies and gentlemen," he said, "I came here expecting to listen and not to speak. This movement for voting bonds I have not favored, though I have made no decided opposition to it. Now I want to assure you, before leaving this house, that I am fully converted to the movement. It ought to be carried in this county without a dissenting vote. I beg to move, Mr. Chairman, that a vote of thanks be tendered by this audience to our esteemed young townsman Albert Vangrift, for his interesting arguments."

This vote was carried amid a storm of applause.

"One minute, Albert," said Mr. Waldo, elbowing his way through the throng as the audience were moving slowly towards the front door for exit. "Drive directly to my house, and I want all the members of your party with you."

Arriving at the hospitable home of his friend Albert found there awaiting the party a supper prepared expressly for them. The tables were tastefully laid and Mrs. Waldo gave her guests a most cordial greeting. From the table the little party repaired to the drawing-room.

"Who was it, now, I wish to know," said Mr. Waldo, "that originated the new scheme? It was a happy thought from whoever it came. There is nothing now to be feared over the result. That speech had fairly won every person in the hall and the new proposition came just in the right time to supplement it. That arrangement will completely overturn every argument of the opposition among those who were not out to hear the speech. We are fairly in possession of the field. Tell me whose idea that was."

"I'm sure *I* can't tell you," said Albert; "William must know, for he brought it to me. I only know the writing looked very much like Tama's."

"Yes," said William, "and so it ought, for it is hers. Tama is the author of that idea, Mr. Waldo. She asked me what I thought of it while Albert was speaking and I proffered some assistance in reducing it to a concise form so Albert would instantly catch the import of the idea. But the idea was Tama's entirely."

"Now, Mr. Warrington," said Tama, "did I not ask you to tell nobody but Albert?"

"You did; but I did not promise. I think Mr. Waldo entitled to the information."

"Well," said Mr. Waldo, "it was a fortunate thought, and I am glad to know that our Tama was its author. It will be hard to tell who is to have the most credit for our victory, for victory we shall have. We might have carried the election on the old proposition, but it is a certainty on the new. The other counties will adopt the scheme and that will make the election sure with them if it is well managed. Albert must take that in hand and see that those counties are thoroughly canvassed."

"But remember, Mr. Waldo," said Tama, "I want it to remain a profound secret. I wouldn't have it known that I sent that paper up to Albert for anything."

"Very well, you modest little girl," said Mr. Waldo teasingly; "we will keep it a secret as long as possible, but we are not going to make ourselves ridiculous if closely pursued for information by those entitled to know all the facts. It would greatly please Judge Gray, I'm sure, to know this bit of history, and if he urges I shall have to tell him."

Thus ran the conversation until half an hour later when the little party bade their good host and hostess "pleasant dreams" and drove merrily away to Mr. Harwood's, which Albert had always made his home.

Acting upon Mr. Waldo's advice Albert visited the other counties, which were to vote upon the question of issuing bonds, attended meetings where the proposition was discussed, and rendered the enterprise most valuable services. The upshot was that the proposition was received favorably by the people and triumphantly carried at the election.

Not many days after the popular vote had settled the course of the counties upon the proposed aid, Albert was called to Philadelphia. Arriving in that city he soon found himself in Mr. Wharton's private office.

"Mr. Warrington and I are going to New York soon," said the old capitalist, "and there we shall meet with the gentlemen who will join us in the railroad enterprise. Before seeing them we have, however, thought it advisable to consult with you, as we are intending to see that you are placed on the board of directors. How does that strike you?"

"That, Mr. Wharton, would be an honor, yet I do not esteem myself qualified, and besides I understand that it is necessary one should be a

stockholder to be placed on the board of management."

"You have demonstrated what your qualifications are," said Mr. Wharton quietly. "Your services, both as the originator of the enterprise, and as its faithful servant in every stage, honestly entitle you to a liberal share in its proprietorship. Also now that the building of the road is assured we shall need your services more than at any time heretofore. Each of the persons interested and who are to furnish the capital, or a part of it, have other important interests to look after and cannot give this much personal attention. It is going to require a large amount of money to build and equip eighty miles of railroad. Our estimates bring it up to twenty thousand dollars a mile, which will call for one million six hundred thousand dollars. One million dollars of this we expect to raise by bond and mortgage, nearly three hundred thousand will come from the counties,* and the rest we will provide ourselves. The county-bonds must be disposed of as they come into our hands, and the company's bonds must be marketed. Much of this business it is proposed that *you* attend to. The only question is, are you prepared to undertake this business? We are intending to place it in your hands in preference to those of any other person. You may rely upon our support under all circumstances."

After some consideration the young banker signified his acceptance.

"A large part of the business connected with the negotiation of bonds will, I presume, be conducted through some Loan and Trust Company?" he asked.

"Yes. We will decide at our meeting in New York to which of the Trust Companies the business shall be given."

This was a position young Vangrift had never for a moment anticipated would be given him. He had looked forward, it is probable, to a lucrative position of some kind in connection with the new project, which he would be able to fill and still retain his presidency of the Williston bank: but a directorship in the new company, far exceeded his hopes.

There was a time when a position of this nature demanded far more labor, keen management, and financial ability than now. That was when great enterprises were carried through without the immediate aid of powerful institutions of money and credit. It is the province of Loan and Trust Companies to further the ends of such enterprises. And how?

In the case before us: This new company wishes to secure a million dollars to be used in the construction of its line of road; and to obtain that vast sum of money it is willing to mortgage its entire property. But should it try to do this in the ordinary way of borrowing money upon bond and mortgage, much difficulty would be experienced. Some person or company of persons must be found able and willing to lend it. Owing to the great amount required this would be next to impossible. The Loan and Trust Company is formed to solve the problem.

"We will raise the money for you," says the manager of this institution. "You must first invest some of your own money in the construction of the road. Grade and bridge ten miles, which will cost you, probably, one hundred thousand dollars. You may then make out a general mortgage upon the property covering, not only what you have built, but also what you intend to build — the entire line, with your right of way, charter and so forth. In connection with this mortgage make out and deliver to us one thousand bonds for one thousand dollars each, and all to be secured by the general mortgage. We will have our lawyers examine your mortgage and see that it is properly recorded in the various counties through which your road passes, and that your charter, right of way, and the like, are all legal and correct. Finding this all right we will place your bonds on the market over our assurance that every lawful requirement has been complied with, and that the necessary amount of work has been done to secure the first issue of the bonds, which should not exceed, say five thousand dollars per mile, or about one half as much as you have expended. When one half of your road is completed and in operation we will market an issue of bonds for an additional five thousand dollars per mile, bringing you for forty miles an additional capital of two hundred thousand dollars. Proceeding upon this plan when your road is entirely finished you will have on the market or disposed of eight hundred thousand dollars in bonds. The other two hun-

* County bonds often sell at less than their face value. Cost of selling also reduces the amount received for them.

dred thousand will then be issued to help you in the purchase of rolling stock and other equipments.

"There is always an abundance of capital for perfectly safe investments. Capitalists are coming to us every day inquiring for some reliable and profitable security for their money.

"We will also, if you desire, find purchasers for the county bonds you are to receive. That is one of our departments of service.

"Our institution also acts as trustee for large and permanent funds and as executors for estates.

"We aid almost all kinds of corporations in procuring capital, such as railroad, steamship, and telegraph companies, gas companies, water companies, and sometimes large manufacturing concerns. We must in all cases be assured of the stability and worth of an enterprise before we give it our endorsement and assistance."

Such was a portion of the information young Vangrift obtained during his first interview with the secretary of a large Trust Company in New York.

The important meeting had been held in New York, the directory of the company agreed upon and Albert was preparing to return to Williston. On reaching his hotel preparatory to proceeding to the railroad station he was handed a telegram. He opened it hurriedly and read:

BOSTON, *Dec.* 15.

ALBERT VANGRIFT,
Care —— Hotel, New York:
Annie very ill. Will you come to Boston immediately?
JOSEPH CROSBY.

(TO BE CONTINUED.)

SOME SUCCESSFUL WOMEN.

BY SARAH K. BOLTON.

IX.

CANDACE WHEELER.

COME with me in New York City to that well-known number, "115 East 23d street," to the house of the "Associated Artists." The head of the association, Mrs. Candace Wheeler, is busy, so we will step into this large studio in the rear, and wait for her.

This studio is a study in color. The walls, of a delicate and light green, are covered with pictures; one especially interests me — a dark-haired girl with her chin resting on her hand, and beside her a sphinx: Modern Egypt and Ancient. Persian rugs lie thick on the floor. The old-fashioned black chairs are wonderfully carved; serpents coiled in the backs, their heads forming the arms. Water-color brushes lie across a bowl on the table, beside which red roses in a yellow vase are dropping their petals, one by one, on the open pages of Robert Louis Stevenson's *A Child's Garden of Verses*.

Everything about the studio reminds me of a girl's grace and delicacy, and I am not surprised to learn that it is the workshop of Mrs. Wheeler's daughter, the artist, Dora Wheeler.

But here the mother comes in to welcome us; she is a happy-faced, attractive woman, with a cordial manner and a winsome smile. She is to show us the artistic fabrics and needlework of the famous house. These art-cloths are of the best in quality; the silks are pure, and the colors fadeless. The work of needle and shuttle is "done upon honor."

We especially have come to look at the now-famous Tapestries, which are unsurpassed if not unequalled in modern times, and we are conscious of a feeling of pride that they are the thought of a woman, and of an American woman. One of the most beautiful in design is known as "The Penelope," a lovely Greek creature pulling out by lamplight the work she has done by day, from the old classic story. There are other "literary canvases": "Hilda" from Hawthorne's *Marble Faun*, and "Evangeline" from Longfellow, and a "Hes-

ter Prynne" from *The Scarlet Letter*. The Zuñi girl and the "Minnehaha" are both fine in conception as well as color. The latter leans against a tree, her hair falling over a branch. Bougereau and Fleury especially commended this when the tapestries were shown in Paris; the latter saying, "Her face is listening." "The Peacock Girl," dressed in mediæval costume, feeding her peacocks, is one of the most beautiful, in color. Most of these tapestries are from designs by Dora Wheeler, who has made each detail a study, faithfully drawing from American history and literature. The inspiration for "The Peacock Girl" came from a visit to quaint old Haddon Hall in England.

These examples of pictorial needlework have won the distinction of being treated by reviewers and critics as works of art. Of "The Birth of Psyche" and the "Winged Moon," Mr. Koehler, the art-critic, says:

"The former is executed upon a salmon pink ground in shades of flesh tint, very pale green and white. The mind — or the soul, Psyche, if that be preferred — is represented by a winged female figure, rising up slowly in a dreamily ascending line, like curling smoke, through the rosy mists of a warm morning, her garment still trailing along the earth, her gossamer wings of a pale, broken green, expanding in the mild air of a new-born day.

"While in Psyche we have the roseate hues of a morning veiled by the vapors rising from the earth, the Winged Moon, although executed upon a ground of the same color, gives us the feeling of a perfect evening. As to the composition, we have again a slightly draped female figure, this time with slender birds' wings. The latter, of pale yellow, are folded around and behind the figure, and assume a form suggesting the crescent of the young moon. The figure, thus bedded upon its own wings, floats in the calm evening sky, in which are slight indications of bluish or violet clouds, and of stars. Painting, whether in oil or in water-colors, seems incapable of adequately rendering this superterrestrial beauty. In this creation of the needle and the loom, however, there is a very potent suggestion, the best yet given, of the glorious effect hinted at."

One naturally inquires how this needle-woven tapestry is made. Mr. Koehler explains thus:

"Upon heavy silk canvas of rather loose and coarse texture the design is produced, or woven as it were, by introducing threads of the colors needed along the woof upon the face. The material which serves as a basis, specially made for the purpose, is in itself very beautiful, and, as the woof and the warp are usually of different colors, develops a play of changing tints, which, aided by the rich gloss of the silk, gives it a life not to be otherwise attained. As the color of the ground can never be wholly suppressed it is easily seen that it fixes the keynote of the scale to be employed, and thus keeps the artist within certain decorative bounds, however strong may be his or her tendency toward realism. The delicacy of gradation that can be obtained by the introduction of threads, either of one color or of several colors twisted together, along the woof, is quite extraordinary. As a practical advantage of these tapestries, it is worth noting that they are absolutely moth proof, as nothing but silk, and occasionally threads of gold and silver, enter into their composition."

Of course any one of these tapestries should command the large price belonging to fine-art objects — and a thousand dollars is hardly its legitimate value. One consideration greatly enhances this



MRS. CANDACE WHEELER.

value, looking at the tapestry aside from its decorative quality — that it furnishes remunerative labor to numbers of women. Mrs. Wheeler and her daughter have in many directions proved themselves benefactors to their sex, while they have greatly developed the artistic taste of our country, raising the needle and the shuttle to the rank of the brush and pigment and the sculptor's chisel.

Do you ask how was this woman, a mother with

home duties, led into this line of work, which not only has made her famous, and her daughter, but has been helpful to thousands in the way of self-support? Let us look back along her life and see.

Born in Delaware County, New York, of New England parentage, she was one of eight children, "each one of whom," says a friend of the family, "has reason to be proud and thankful for the chance of inheritance of such characters as the parents. The father was as good as the prophet Elijah, and as fervent as Paul, and withal possessed of what we now call the 'artistic temperament.' He had a passionate love of everything beautiful in nature, or in the interior world of thought, and so fine a religious and moral nature that he really became the conscience of the community. The mother, still living at eighty-six, is the impersonation of that Yankee gift which Mrs. Stowe calls 'faculty,' all of which was exercised in trying to keep her children up to her own and the father's ideal. They *had* to be intelligent, and obedient, and industrious, and kind to others, and truthful, for she compelled it. They were taught that life meant work, and that what concerned the happiness or welfare of others was *their* business. And so they all grew up and swarmed out into the world, so early in life that she is wont to say that 'her children all ran out of the nest like chickens with the shells still on their heads.'"

Though these young people had little money, they had, you see, what was better than money — a happy home and the willingness to work. Candace, the third child, and second daughter, would walk with her father by the hour, drawing every rare flower, which he picked for her, just because it gave him pleasure to see her do it. So fond of poetry was he that he clipped from the newspapers each fine poem which he saw, and saved it for his children. No wonder that such seed-sowing in little hearts brought forth fair fruit of flavor.

At sixteen years of age Candace married a young merchant and went to the city of New York to live. Three of her brothers followed her there in due time, adding themselves to the number of country boys who so often take their places in the front rank of successful merchants.

In her unaccustomed city-life, with all the pleasant country sights and sounds lost to her, all natural beauty blotted out, no sunsets or mountain tops or blossoming pastures, nothing seemed beautiful to our young countrywoman outside of her home-life, until she suddenly found that it was the beneficent province of art to create beauty for those who had lost nature. Yet a picture to her was at first a very inadequate substitute for the unrollment of an evening sky, with all the dusky valleys of the Delaware lying in perspective.

The love of art and the companionship of artists in time became a part of the family-life. The Studio-buildings were hives of friends; and under this genial social influence young Mrs. Wheeler began to paint. An "instinct for color" proved to be one of her natural gifts, and with the criticism from the artists who were foremost among our American painters, it was easy to form a high standard and work toward it. Her own friendliness had made artists helpful and friendly, and she rapidly expanded in the sunny atmosphere.

Fortunately she had always drawn; even from the time when the stalk of tiger-lilies she attempted was high enough to look down upon her little hands. She had long ago come to know every expression of every plant, for she had lived with them, and had held her father's hand while she gazed up at the transparent crimson bell of color which the meadow lily made between her and the sky, or the fiery pink which the wild rose showed with the sun behind it. She knew at just what stage of growth the timothy-grasses threw out purple, feathery seeds, and every curve and angle of the blade and stem; and all this digested and assimilated knowledge of color and form helped her rapidly on now at her easel.

After some years of city-life, Mr. and Mrs. Wheeler made a country home on Long Island for their growing children, and called it "Nestledown," an appropriate name for the home of four little people, who, like their mother, loved the big trees, the rustle of green leaves, the sunshine and a quiet home nest.

Twice the family made long sojourns in Europe, where they all studied together, music, literature, the languages and art; the mother as enthusiastic a student as her children, and well-nigh as youthful in her feelings and sympathies.

When they returned to New York from their second visit to Europe, Mrs. Wheeler's work for the outside world began. The conditions of life in America had been changing since her youth. She saw men so busy in the hard struggle for

place and success that fewer married, and those who did could maintain only their immediate families, so that vast numbers of women were left without homes and the means of support.

Of these women those who had accomplishments zealously tried to turn them to account. They taught music; made fancy articles; painted little pictures; concocted all sorts of tempting conveniences and sold them to their friends, or their friends' friends, in an anxious, unsuccessful way.

Many of these women were the friends of Mrs. Wheeler, and she was in sympathy with each. This state of things at large became at last thoroughly borne in upon her, and then her mother's New England faculty and her father's zeal for helping others suddenly clasped hands, rose up within her, and examined the times for a remedy. "Why not," said Mrs. Wheeler, "bring everything that any woman can make, and needs to sell, into a shop, and let everybody come and buy what they really want, and put an end to this forcing of the wrong thing upon the wrong person?"

But who would pay the rent, and attend to the store? Mrs. Wheeler was equal to the emergency. She called together a few of the best and the richest women of New York, and asked for opinions. Everybody had seen the want, everybody was glad to hear of a remedy. Then Mrs. Wheeler sat down at her desk and wrote a circular and printed it at her own expense, telling the women of New York that it was proposed to form a large and influential association for the purpose of establishing a place for the exhibition and sale of "sculptures, paintings, wood-carvings, paintings upon slate, porcelain and pottery, art and ecclesiastical needle-work, tapestry and hangings," *which work shall be done by women.*

About two hundred women responded to this circular, and they formed themselves into the New York Society of Decorative Art. They took a house and made the society a blessing and a success, by enlarging the range of things women could do. China painting, needle-work, decoration upon wood and other minor arts were thoroughly taught. Mrs. Wheeler gave her time and thought and heart fully to the work.

Soon arose the question: "What shall we do with inartistic labor?" So many desired to earn a livelihood, but had received no artistic training. There must be a shop where such work could be received, and Mrs. William G. Choate, Mrs. Wheeler and others proceeded to form a "Woman's Exchange." As Mrs. Wheeler was the Corresponding Secretary of the Decorative Art Society, she succeeded in encouraging women in many other cities to form auxiliaries and exchanges. Now there are few American cities



MISS DORA WHEELER.

without these institutions, and they have been copied in Canada, Sweden and Germany.

The next thought in Mrs. Wheeler's mind was to demonstrate the fact that woman's labor, *if well trained*, was needed in the world, and could not only make its demand but find its wages, without the intervention of charity or benevolence. To this end she proposed to unite with other artists in an artistic and decorative enterprise, under the name of the "Associated Artists," where embroidery and decorative needle-work should be made a part of the scheme. Her friends now predicted a failure. But her husband and brother were ready to aid her with money. And she did not fail.

The very first work she and her allies were entrusted with was the now famous drop-curtain of the Madison Square Theatre. To the execution of this work was brought no special technical knowledge of embroidery, but an intelligent understanding of the methods of both modern and ancient schools, and a direct application of knowledge of pictorial effect. It was a translation of a painter's methods into needle-work. Every textile and material which would give color or effect, and every method which would express drawing and perspective, were considered, both broadly and minutely. The result was a landscape with color, foreground, middle distance and perspective — in embroidery.

To Mrs. Wheeler the development of a school of American embroidery meant more than mere stitchery, however beautiful. It meant the training of bold strong designers, the teaching of girl art-students how to turn their knowledge in a direction where it was needed, and with a needle instead of a brush to treat textiles with a feeling belonging to pictures. Already a better kind of talent has been developed and has been brought to bear upon a branch of work that is purely feminine, and with a result that is a great gain to decorative art. Yes, from the "Associated Artists" have resulted the important additions to the art of this country; the needlewoven tapestries, and the manufacture of as beautiful drapery, upholstery and wall-hanging fabrics as are made in the world to-day. Careful study of ancient textiles, careful selection of the best qualities they possess, and careful pursuit of appropriate designs for modern fabrics — and missing them, bold creation of beautiful forms — have made the "Associated Artists' Textiles" known among artists and art-lovers at home and abroad.

The following incident shows what Mrs. Wheeler has accomplished in decorative design. Messrs. Warren and Fuller, some two or three years ago, offered two thousand dollars in prizes for the best wall-papers, the judges to be three of the most prominent architects and decorators of New York. Mrs. Wheeler prepared one design, which had bee, honey-comb, and clover as motive; her daughter Dora, one; and Miss Clarke, a young lady who had studied with them from the beginning of their work, another. Sixty designs were sent from Germany, England and France, and two hundred other designs were accepted for the competition. Mrs. Wheeler took the first prize of one thousand dollars, Miss Wheeler, Miss Clarke and Miss Townsend, a friend and student, the second, third and fourth. Four women, and those nearly in one household, took all the prizes!

She herself believes that one of the most important things she has done is "to teach women that they must bring perseverance, character and teachableness, as well as technical skill to their work in the world."

Back of her own wonderful executive ability and knowledge, she has great kindness and sympathy, without which no person can be a good teacher. She has, says a lady who has worked with her for years, "the biggest heart in the world." She usually gives one afternoon each week to talk with those women who wish to do good and remunerative work, and are glad to come to her from distant cities for suggestions.

Mrs. Wheeler has done much other public work. She has been one of the managers of Cooper Institute, lecturing before the students upon designs as applied to textiles, and also before the Gotham Art School of artisans and artists; a member of the State Charities Aid Association, and a writer of books which her daughter has illustrated. She was invited to the Silk Congress in England, as an expert in silk-weaving.

She has plans in prospect for a Woman's Hotel, for self-supporting women, a co-operative, dignified, self-managed, home-like home, and when one is established she hopes it will be the mother of thousands, as the Decorative Art Society and the Woman's Exchange have been.

If Mrs. Wheeler's public life has been successful, not less, be sure to take note, has her home-life been a happy one. "Nestledown," a red, roomy cottage in the midst of three hundred acres on Long Island, is a most charming place to visit. It is a home, with its great fireplaces, which artists and poets enjoy; glowing with dainty color. The hall in light Venetian red, contains Dora's first work, along its stairway; a procession of the children of the family, in Japanese costumes, trooping up to bed, one with a doll in her arms, and the artist-son, Durham, now grown to manhood, with a toy gun in his hand. The parlor is in brown and gold hues, the frieze, fleur-de-lis on matting. The library, in copper and robin's-egg blue, is

rich in books, and pictures, many of them remembrances from authors and artists. The motto of the house is engraved over the mantle:

> "Who lives merrily, he lives mightily;
> Without'en gladness availeth no treasure."

The dining-room especially interested me from its wall-paper, for which Mrs. Wheeler received her thousand-dollar prize, the exquisite china on every hand, and her paintings on either side of the sideboard of mullein and cat-tails.

Their summer home on the top of the Catskill Mountains, must be no less charming than "Nestledown." They call it "Penny-royal;" "because," say its owners, "it scarcely cost a penny," and "because," say the friends who visit there, "it is the most royal place they ever saw."

Thus in the prime of her womanhood, Mrs. Wheeler has come to success along the way of noble thought for others, by wise use of her time, by careful development of her own natural tastes and gifts, and by a cheerful courage that of itself presages success. And though it be her daily work to plan, to direct, to govern, to buy and to sell and to estimate carefully and safely, to be a good business woman as well as an artist and a dreamer of dreams of beauty, she has kept her womanly individuality and the greatest charm of woman, lovableness.

WONDER-WINGS, MULLINGONGS, COLOSSI, AND OTHERS.

By C. F. Holder.

IX.

ANIMALS AND THEIR YOUNG.



BEAR AND CUB.

IN the care of their young, the lower animals exhibit more of what we term intelligence than at any other time; they are then on the alert, and all their faculties are brought into play in keeping up a watchful lookout for their little ones. Many of their actions at this time are undoubtedly instinctive, but others show that the very humblest creatures possess in a greater or less degree that higher power—thought.

As we note the acts of these curious parents, not the least interesting feature is their resemblance to those of human beings.

Almost every group has some peculiar way or method of transporting the young; and yet, oftentimes entirely different animals carry their little ones in almost exactly the same way, affording some strange and amusing exhibitions to the fortunate observer, and it is my purpose to contrast some of the most striking of these methods, which show that through all animal life, the various creatures, from man down, are moved by very nearly the same impulses.

One of the most interesting points is to observe how nature always adapts her dependents to their surroundings. Thus in the island of Martinique there are no swamps, yet there are tree-toads; and the very important question arises, "How can the baby tadpoles live?" Almost everywhere else they pass a season of their lives in the water, undergoing certain changes; gradually growing legs until they pass from a fish-like form to that of a lizard, and finally emerge from the water perfect frogs or toads. In this instance nature provides that the little one shall, as soon as hatched, live without water, and we find them clinging to the mother's back by a glutinous secretion and there carried about with the greatest ease until they jump off and begin life on their own account.

In a larger and remarkable group of animals, represented by the kangaroo, the young when first born are exceedingly minute and absolutely help-

less; so tender, in fact, that they would perish immediately if there was not a special provision for them. This we find in the pouch, from which these animals and their allies are called marsupials. The kangaroo, the opossum, the wombat, and a number of others represent them. As soon as the little kangaroo is born it is placed in the pouch, where it remains until quite well grown, and one of the most comical sights is to see a huge kangaroo mother moving along with the little head of the baby reaching out of its resting-place after grass; in fact, feeding as it goes along. The little ones leap from the pouch with the greatest ease, and at the slightest alarm dart back, often diving in just in time as the powerful mother takes a mighty spring and goes bounding away. In former times there was a kangaroo as large as an elephant, and if it carried its gigantic baby in a pouch, the sight must have been a singular one.

Now, curiously enough, while the kangaroos are the true marsupials, their pouches containing the organs of nutriment, there are many other and widely different animals which protect their young in a seemingly similar manner, and an interesting example is the little sea-horse, which is so familiar in collections, and not uncommonly found on the eastern coast. The proper name of the little creature is *Hippocampus*, and it is a fish about four inches in length, although but few would consider it a fish at all. In the first place it stands upright in the water, moving forward by the screw-like vibrations of its back or dorsal fin which is a most beautiful object in motion. The tail ends in a point, without a fin, and is prehensile, or has the power of grasping just as has the tail of some monkeys or the opossum. The head of the little animal is remarkable in its resemblance to that of a horse, and all in all, while the *hippocampus* almost heads the list of the fishes it is a singularly unfish-like animal, as we understand the term. Those that I have found have been on the Florida reef in the Gulf of Mexico, but they live in many seas, and are almost always found clinging to the sea-weed with their little tails tightly wound about a branch, and looking so much like it that only the sharpest eyes can distinguish it; indeed, some species, and particularly one from Australian waters, have long streamers growing from the various parts, giving the animal the appearance of a mass of sea-weed floating along.

In the kangaroo it was the mother which had the pouch, but among the sea-horses it is the father upon whom this responsibility devolves, the mother merely depositing the eggs and running away, her material duties ending there and then. But as soon as this is accomplished her mate assiduously collects them — just how I think has not been observed — and soon the little marsupiums that so resembles the pouch of the true marsupials, becomes greatly distended and packed with the coming brood. It is on the ventral or lower surface, well down and very prominent at this time. The eggs are carried about in this way until they are hatched, when the sea-horse presses the pouch against some hard substance, and forces the herd of young colts out into the water, and then ensues a remarkable sight which I was once so fortunate as to observe. They seemed to issue in countless numbers, though probably there appeared to be many more than there really were, and all minute pink and white little creatures almost invisible to the naked eye, but the image of their parents and preserving the same curious upright position, moving about slowly through the water, and only to be seen when the sunlight struck the tank in which they were confined. It is needless to say that the parent now loses all control of the herd, and the frisky sea-colts are from this time on at the mercy of every fish that may chance to see them, and in the open water comparatively few of every brood attain a good old age.

We would hardly expect to find a pouch among birds, yet some of the penguins have one, in which they carry about their single egg; and an albatros has a similar arrangement. The tender care which birds show to their offspring is almost too well known to be dwelt upon. but there are some instances of affection which are of more than ordinary interest. Thus the woodcock has been seen to protect its young in a somewhat remarkable way. A hunter in walking through the brush or grass, suddenly observed a bird dart up and fly away with something between its claws. Thinking that it was injured he ran ahead and attained a position close enough to see that the mother was bearing between her feet a baby woodcock, perhaps a weak one of the flock which could not escape itself. On another occasion a sportsman saw a woodcock endeavoring to carry its little one on her back; but this was not quite so successful,

the fuzzy little fellow rolling off into the grass.

In the islands of the Florida Keys I have seen the eggs of gulls so thickly strewn about that it was difficult to walk without stepping upon them. Here the birds were relieved from the necessity of setting, the eggs being left in a pure shallow in the sand where the sun hatched them; and so numerous were the young birds that without doubt they were fed promiscuously by the mothers, though it is possible that each may have recognized her own. Some of these birds, called noddies, built a rude nest in the trees, and this was often the scene of terrible struggles, as no sooner did the old birds bring a choice morsel in the way of a sardine, mullet, or flying fish to the nest than a score of hermit and other crabs began to ascend the bush and endeavor to steal the food, and not rarely did they succeed; utterly disregarding the vigorous protests of young and old birds.

Lions and tigers carry their cubs in their mouth just as do our ordinary cats, and this is very generally true of the cat-tribe. A curious instance of rather misplaced affection was seen in the Zoölogical Garden at Central Park some years ago. For a long time an old and large dog, named Fan, had been owned by the Garden. She showed strong attachment for various animals, and finally when a litter of lions was born, and the mother died, it was proposed to make old Fan bring them up; so her own puppies were surreptitiously removed one night while she was away, and the two diminutive lions put in their place, the only apparent difference between them being in color. When she returned she snuffed at the new-comers but did not seem to notice the change, and from that time assumed entire charge of them. Soon they grew such romping babies that she was unable to oppose them, and they buffeted her about and struck her with their enormous paws until undoubtedly her canine mind was seriously disturbed. Finally they grew so large and powerful that to protect her they were separated. The last time I saw old Fan she was standing looking with something that was very much like amazement at her strange offspring.

Dr. Abbott records an instance he observed which shows that the cat-fish mother was entitled to no little credit for self-sacrifice. The brood was captured and confined in a glass jar on the shore, when the parent actually left the water and crawled upon the bank to reach them, and when they were placed by her side wriggled back again with them. Generally in fishes it is the male which stands by the young, and only in few exceptions does the female exhibit any affection.



A WATCHFUL LOOKOUT FOR THEIR LITTLE ONES.

The ants, according to some naturalists, rank next to man in point of intelligence, and perhaps this is so, if we judge by their actions, some of which resemble ours. Concerning their young they are very solicitous, and if their house or nest is disturbed, instead of looking out for themselves they seem immediately to think of the young, which are stored away underground, like so many mummies, in some stage of their metamorphosis,

and even while covered with earth, amid what is to them an appalling catastrophe, they seize the little white objects, which look like grains of rice, and rush away with them to places of safety. Among the South American ants very ingenious methods are adopted to produce a food which is necessary to the young. This consists of a very small and delicate fungus. These ants may be said to be agriculturists, as they grow this by lining their subterraneous homes with certain leaves, which as they decay encourage the growth of the desired food. The latter is about as large as the head of a pin, and is eaten by the young ants with great avidity. To provide such a supply would show that these little creatures certainly think; instinct cannot explain it.

The actions of many of the large wasps are quite as remarkable. Some of them dig a tunnel several inches deep into the ground. In the bottom of this, which is both tomb and nursery, are placed the eggs of the wasp, and upon them are dropped spiders and various insects which have been caught by the parent. It might be assumed that these animals would soon decay or dry up, and become useless as food for which they are intended, by the time the eggs are hatched; but the wasp has looked out for this, and instead of killing its captives outright has carefully refrained from injuring them, merely puncturing them with its sting which produces in the victim a state of coma. In other words, the insect is alive, but paralyzed by the sting, and remains in this condition until the eggs of the wasp are hatched, when the young make it their first food. These large wasps are extremely powerful and voracious, and I have seen them dash at a seventeen-year cicada, itself a large insect, and even attempt to take it from me when I went to the rescue.

Another example of this care for the young is found in the mole cricket, so common in the South. This little iron-jawed creature erects about its eggs a perfect fortress, surrounded by moats, secret passages and streets, and watches over them with the greatest vigilance. If there is a change in the weather and the cold penetrates the ground the eggs are immediately removed to a nest at a lower level, and after very damp weather they are taken to the surface and given a sun bath so that no fungoid growth can affect them.

Among our Indian tribes we invariably see the pappoose swung to the mother's back or carried in the way called pick-a-pack, and it is curious to note how many of the lower animals transport their little ones in the same way, oftentimes when it requires no little effort on the part of the parent. One of the most interesting animals I have ever seen was a large South American ant-eater; the long-nosed bushy-tailed fellow which walks upon the side of its feet, so long are its claws, whose scientific name is *Myrmecophaga jubata.* It stood upright, peering at me with its small bead-like eyes, its great tail completely covering its back like an umbrella, and as I watched the curious creature I became aware of another pair of eyes and another long nose just above the head of the large one, and it soon dawned upon me that the ant-eater had a little one, and that it was perched upon the mother's back, completely concealed by the long bushy tail that was spread over it like a canopy. And this was the way the baby, and sometimes two, was carried about. The great tail serves a double purpose: it not only covers and hides the young when upon the mother's back, but it protects the ant-eater herself, giving her the appearance of a great bush.

While the ant-eater is a slow-going clumsy beast it is an enemy to be dreaded at close quarters; the long sharp claws being terrible weapons. I have been informed that on one occasion a native saw an ant-eater carrying its young pick-a-pack, as I have described, and thinking to secure it for dinner, as the little fellows are considered great delicacies, he approached and attacked it with his spear, when without warning the animal sprang at him, her babies rolling off as she struck the unfortunate man so powerful a blow with her claws that he was instantly killed. The claws of the ant-eater are its only weapon, being long, sharp, and powerful to enable it to tear open the great ant-hills. Its mouth is extremely small, and at the end of a long pointed snout, while the tongue is of remarkable length and perfectly adapted for the work it has to perform.

In South America another animal, the sloth, carries its young in the same manner.

The brown bear of Asia carries its young pick-a-pack, and when walking along sedately bearing the cubs, one or two, upon its back, it presents a very curious appearance.

In Equatorial Africa hunters often see young

animals in curious positions. Once when a party had crept up to a lake in the hopes of finding a herd of elephants, they saw instead some twenty or thirty feet from the shore a large baby hippopotamus that seemed to be actually standing on the water, its huge clumsy feet resting upon it. The hunters supposed that it was on a sand bar, but as it soon began to move away without any motion of the feet it became evident that the thousand-pound baby was upon its mother's back. It rose gradually higher and higher, and as the old one moved up the bank it was seen to be standing on her broad back, being carried up and down stream in this way.

Among our own comparatively familiar animals we find a most interesting example of pick-a-pack riding. The common opossum of the South, the only pouched animal of this country, first carries its young in a pouch; but when they are well grown and capable of running about, they take their places upon her back and cling there, sometimes six or seven, presenting a very animated appearance; their little black eyes glistening, and the little ears erect. The little opossums have a peculiar way of holding on; in this having an advantage over almost all other animals. Their tails are what is called prehensile, or have the faculty of clinging to any object like the tail of the so-called ring-tailed monkey; so when they leap upon the mother's back they clasp their tail about hers and so retain their hold; the mother bending her tail over her back so that all may have a secure grasp, and in this way the family travels about among the tree tops in search of food.

Nearly all the monkeys carry their young in their arms, and they are often seen astride of the neck, peering over the mother's shoulder in a comical way.

The whale will often support her young on her back, and I remember an instance where a California whale and calf was followed in shore; the latter, wounded by the whalers, was floundering about and sinking, ultimately to be drowned, when the devoted mother rushed to the rescue, and placing herself under the enormous baby lifted it up near the surface so that it rested upon her back, and actually endeavored to carry it off in this position, falling a victim to the bomb of the whalers while attempting the rescue.

The sea otter, that is found in the same waters, is also noted for the care of its young; the little ones being carried about in every conceivable position. They are often found in the great kelp beds that lie between the breakers and the shore in some parts of the Pacific coast. The gigantic weed breaks the force of the waves, and forms a partial resting-place. Here the otters are often seen lying upon their backs or swimming about, bearing their little ones, and sometimes tossing them into the air just as human mothers toss their babies to hear their shouts of merriment.

The dugong with its grotesque, almost human face, supports its young upon its flippers, and this occurrence is probably the origin of many of the tales of mermaids which so many of the ancient works contain. The old voyagers, seeing the curious figure half out of water, holding the young in so human a position, readily believed it to be the mermaid of which they had heard.

There is hardly a branch of the animal kingdom in which we cannot find some creature whose little ones ride pick-a-pack. The young scorpions as soon as born crawl upon their mother, covering her with a bristling array of claws and tails, so that she is often completely hidden, and, terrible to relate, they soon devour her for her pains.

Many spiders ride about upon their parent's back, and when they are disposed to stray away first fasten a thread of silk to her, as a sort of apron string by which they can travel back. The mother spiders are particularly careful of their young, and when bearing the egg sac about are very courageous. I have taken hold of an egg bag held by a mother, and had her dart at my hand, pull and struggle, and only release her hold when she was actually forced away. To protect their nests some species adopt the most remarkable expedients. Some make burrows in the ground which are closed by spring doors covered by growing plants placed there it is alleged by the spiders themselves. Once in these silk-lined dens the enemy might expect to find the young spider family, but, branching off from the main tunnel, another will be found also having a door, which closes so perfectly that only the sharpest-eyed enemy can perceive it, and here perhaps the young spiders lie concealed, feeding on the results of their parents' foraging.

Other spiders envelop their eggs in a silken balloon, and suspend it by a single thread, and thus floating in the air it is safe from attack.

SEARCH-QUESTIONS IN GREEK HISTORY.

By Oscar Fay Adams.

IX.

GREEK ARCHITECTURE AND SCULPTURE.

161. What is the primary cause of the existence of architecture?

162. To what great force in human life does architecture owe its highest development?

163. To what modern explorer are we indebted for our knowledge of the oldest specimens of Greek architecture?

164. Into what three parts are the columns of a building divided?

165. Which of the three orders of Grecian architecture displays the acanthus leaf as a prominent ornamental feature?

166. What famous temple was burned by Herostratus in order to immortalize himself?

167. What temple was completed by the Roman emperor Hadrian, 650 years after it was begun by Pisistratus?

168. What building is considered the most perfect achievement of Grecian architecture?

169. To what order of architecture does it belong?

170. Mention the most important theatre in Greece.

171. In what noted building did Aristotle teach?

172. About what period were statues first erected by the Greek in honor of men?

173. How did this extension of the province of sculpture stimulate art?

174. About what period was the art of casting bronze figures in a mould discovered?

175. What two sculptors first gained renown for statues in marble? Where did they establish a school of art?

176. What statue was considered the greatest work of Phidias?

177. Mention the two most noted sculptors of the second period of Attic sculpture.

178. Name two famous sculptors and workers in bronze in the Sicyonian school in the time of Alexander.

179. Name the greatest painter of this period.

180. Mention the most beautiful work of the Rhodian school of sculpture, and state where it now is.

ANSWERS TO JUNE SEARCH-QUESTIONS.

121. The news of the destruction of the Athenian forces in Sicily.

122. The establishment of an irresponsible governing body called the Four Hundred.

123. The Persian satrap of Ionia whose alliance was sought by both Spartans and Athenians.

124. The battle of Agospotami.

125. 404 B. C.

126. The assembly of thirty members established after the fall of Athens for its temporary administration.

127. Theramenes, whose policy was so loose as to cause him to be compared to a shoe which would fit either foot.

128. Critias.

129. Socrates.

130. For eight months.

131. Cyrus.

132. Xenophon's Anabasis.

133. Epaminondas.

134. Agesilaus, king of Sparta.

135. The Spartans and the Thebans.

136. Sparta. An alliance between these cities against Thebes followed.

137. An engagement between the Spartans and Arcadians in which none of the former were killed.

138. Four.

139. At Olympia in 364 B. C. in a battle between the Eleans and Arcadians.

140. The death of Epaminondas at the battle of Mantinea.



A YOUNG PRINCE OF COMMERCE.

By Selden R. Hopkins.

CHAPTER XII.

A VICTORY IN WALL STREET.

"WILLISTON, 1st mort., 102½.' Yes, that's right."

Thus to himself repeated a young man in the spacious lobby of a great hotel in New York early one bright April morning. He had just come from his room and was on his way to the dining-hall. Pausing at the news-stand in the lobby he had procured a morning paper and run hastily over its columns. A moment later a prominent headline had secured his attention. It was over a column to which many readers of the morning journals seldom if ever give attention, and consisted of the one word: "FINANCIAL." First in this column, was printed some editorial comments on the stock market, and the previous day's operations at the Exchange; but the young man's eyes followed rapidly down to a line in small caps: "Railroad Bonds." In the somewhat lengthy list under this sub-heading were the words which had proved so interesting: "Williston, 1st mort., 102½." Again his eyes followed the print farther down. Coming now to another attractive line in similar type which said, "Railroad Stocks," the reader paused:

"'Williston, 87¼, 88½, 88¼.' That's right too."

It was not because these figures conveyed valuable information that they were so eagerly sought, for they told nothing the young man had not the day before become well aware of. Merely to satisfy himself that the quotations he looked at had been properly reported had he made this hasty examination. Well he knew that the bonds, in the placing of which on the market he had been so instrumental, had sold the day before at 102½. As well too was he equally informed upon the prices paid for Williston Railroad stocks. With deep anxiety had he watched the opening prices at 87¼, seen them rise in the height of excitement to 88½, and before the hour of closing drop to 88¼. The information found here was what he had expected to find, viz., the lowest, the highest, and the closing prices for the Williston stock at the New York Stock Exchange on the previous day.

[All quotations of bonds and stocks sold at the Exchange are made at a rate per cent. on their par value. The face value of these bonds was $1000 each; at the price of 102½ each bond would bring $1025. The bonds, therefore, were at a premium being worth 2½ per cent. above their face value. The par value of railroad stocks is almost invariably $100 per share, and the quotation of prices like those of bonds is made in cents on the dollar, 88¼ meaning $88.25 for each $100 share.]

Folding his paper thoughtfully he proceeded to the hotel office for his mail, and then passed into the dining-room where after ordering his breakfast he looked over his letters. From among them he selected one bearing a foreign postmark, opened it, and was favored with this information:

Paris, *March* 25.

My dear Friend:

We have just returned to Paris. My last letter was mailed at Frankfort which place we left last Thursday. I have been out riding to-day and feel sure I am gaining strength gradually.

We had a pleasant time at the Springs in Germany, though I can't say it was delightful. I visited the *bourses* at Berlin and Frankfort as you requested and shall go to the Paris *bourse* with papa to-morrow. The particulars of our "doings" and "seeings" I will write you when we reach Geneva. That will be only a few days as we leave here

on Tuesday next. Shall remain in Geneva at least a week. Our letters will be forwarded from here.

There is just one pleasure lacking to complete the true happiness of our tour — you may exercise your imagination as to what that is.

Tama says she is enjoying herself far better than she expected (dear me! I should have been so lonesome without her) and asks me to say that she sent by post yesterday those presents for Tossa and Mitty.

ANNIE.

This letter helps *us* to clear up a score of misty circumstances. First it explains that the young man at the breakfast table is Mr. Albert Vangrift; next it tells us why this was the letter first chosen for perusal; again it assures us that though very ill in Boston when Albert was telegraphed for, Miss Crosby did not die, but has so far recovered as now to be "doing Europe"; and further we are instructed that Miss Tama Vangrift, as the guest of the Crosbys, is enjoying a tour abroad; and, besides all this, the tenor of that brief note may convey some significant hints which it is not essential that we should consider at this time.

We see by the date of the lines from Paris that since work on the Williston railroad commenced several months has elapsed. Though not favorable to vigorous railroad operations these months have witnessed a marked change in the condition of affairs. Many miles of the road have been graded, bridges have been constructed, and the construction trains are still working to their full capacity.

But let us linger with our prominent young railroad official, for such Albert Vangrift has now become, and observe him among the operators of Wall street and at the Stock Exchange. Not only a railroad manager is our young friend, but a busy financier has he become in his extensive operations to secure the means for constructing in all possible speed his important line of road.

Master Albert did not hasten to his business rendezvous. Not many minutes before ten o'clock do the persons with whom he was to engage reach their offices; it was after ten when he entered his broker's office in the vicinity of Wall street.

There had taken place an event that made the daily scenes upon the floor of the Stock Exchange, of deep interest to every large stockholder in the Williston road. Arrangements had been completed for a new line which was to extend from Boston to a point far west of Williston. In its most direct course it would come upon the line of the Williston road at or near Williston and then follow that line a distance of more than seventy miles. Therefore for the projectors of the new enterprise to acquire control of the Williston road with its right of way, franchises, and completed work would be a business stroke of consequence. It would hasten by many months the completion of their road and save for their enterprise many thousand dollars.

There was one way and one only in which this acquisition would be accomplished. The projectors of the new road must acquire a majority of the shares of stock of the Williston road. The only way to do so was through the medium of the Stock Exchange.

[The capital of all business corporations is divided into shares called "shares of stock." The owners of these shares are stockholders or shareholders and are the actual proprietors of the enterprise. It will be seen, therefore, that when the business of such a corporation is good, or the prospects for it are favorable, the shares will increase in value and *vice versa*. The very fact that the projectors of some other enterprise wanted to further their interests by getting possession of this Williston road was quite enough to immediately increase the price of the Williston Shares.]

Have you ever visited a Stock Exchange? The one in New York is the leading institution of its kind in this country, though there are a number of others which do great business. The building of this organization is a magnificent edifice standing in Broad street, near Wall, and extending through the block to New street, with a side entrance through a long hallway out of Wall street. It is visited every year by thousands of sightseers to the money metropolis, and not one in a hundred knows more of its internal affairs when he leaves its walls than when he entered. The visitor views the scene from the balconies which are just one full story of the building above the floor of the main room in which the members meet. From these galleries he may look down upon the swarm of brokers and hear their shrieks and yells, but he will be none the wiser for all he hears. He will see them gather in groups around the bulletin-boards which stand about the room, and there, waving their hands vigorously, shaking in the air first one finger then two fingers and bellowing at the tops of their voices.

"Five hundred — sixty!" by one.

"Thousand — sixty!" by another.

"The lot!" by a third; and then down go their pencils to note the transaction.

"Transaction! indeed!" says the visitor; "and how much of a transaction could that have been?"

"That," answers the guide familiar with the scenes, "was a sale of a thousand shares of Union Pacific stock at sixty dollars per share. A transaction of sixty thousand dollars in less than half a minute."

"And who made, do you know, by the sale?"

Ah, that's the question. We know one thing, and that is each broker made one eighth of one per cent. on the par value of the stock or one hundred and twenty-five dollars as his commission, even though it took less than a minute to do it.

"But isn't that an extravagant profit for a broker?"

"You must consider these brokers pay dearly for the privileges they enjoy. For their membership, or 'seat,' as it is called, they have paid not less than twenty thousand dollars, many of them twenty-five thousand and some over thirty thousand dollars."

[The price fixed by the association for membership is $20,000; but as the limit in members (1100) has been reached, to become a member one must purchase his seat from some member willing to retire. As much as $32,500 has been paid for such a privilege — that is $12,500 above the established price of the association.]

"But I suppose one may charge less commission if he wishes?"

"No. It is a rule of the Exchange that no member shall buy or sell stocks or securities of any kind without charging a commission, and this commission is fixed, for all except mining stocks and Government bonds, at one eighth of one per cent. on the par value of the stock bought or sold. A member who breaks that rule is liable to expulsion from the association."

"And why do they gather in groups about those small boards in various parts of the room?"

"You will notice upon each side of those boards the name of some railroad; on one is 'Union Pacific'; on another 'Northwest', meaning 'Chicago & Northwestern'; and the third 'Del. Lack. & Western'; and on still a further one 'Lake Shore', meaning 'Lake Shore & Michigan Southern.' The purpose is that those members having any particular kind of stock to buy or sell may know where to meet others wishing to deal in the same kind of stock. The group you see standing in front of the board bearing the words 'Lake Shore' are all there for the purpose of buying or selling 'Lake Shore & Michigan Southern' stock should the prices offered be satisfactory."

"And how, if they are brokers, are they to know that since they are only buying or selling on commission? I suppose the prices change frequently."

"Few only of the Exchange members buy and sell on their own account. Almost entirely are the transactions on commission; and almost every member is a partner in a firm of brokers. You see at one side of the room a long lobby partitioned off with a tall wire fence. The crowd in the lobby, you will observe, is composed largely of messenger boys. These messengers are the human railways and telegraphs between the member of the Exchange who is 'on the floor' and his firm of brokers at their office. Suppose some person in Boston wants to buy one or two 'lots' — a lot is one hundred shares — of New York Central stock. He telegraphs the firm of brokers in New York his order, and from the office the messenger is dispatched to the Exchange bearing the directions. Entering the lobby he announces to the attendant there to whom he wants to deliver his message, and within a few seconds the desired member appears at the gate, takes the order and hastens to the New York Central bulletin, where he finds plenty of sellers of that particular stock. Within a moment the work is completed. The principal, that is the man in Boston for whom the stock is purchased, may name in his order the price he is willing to pay, and if he does so this price is repeated upon the order sent to the Exchange, and it governs the member in his purchase. Mr. B—— in St. Louis, desiring to sell some Missouri Pacific stock, pursues the same course as the gentleman in Boston who wanted to buy. He accomplishes his purpose with as much ease and about as quickly as if he were sitting in an office in Wall street."

"I don't understand how that can be when it generally requires from one to two or even three hours for us to send a telegram from St. Louis and have it delivered in New York."

"I understand that; but it is because your tel-

egram must take its chances with thousands of others in the ordinary course of business of a great company. It may have to be repeated at some intermediate office, and the messenger may linger on his way while delivering it. Many of these New York brokers own their own telegraph lines to all the principal cities of the land, so that a representative in St. Louis or Chicago communicates direct with this New York broker."

"How is it these Stock Exchange members appear neither to receive nor deliver the stocks they buy and sell? I see nothing that looks like shares of stocks anywhere in the room."

"Neither do you see money change hands, either bills or checks. No operations of that nature take place here; it is all done at the members' offices. The brokers carry only a small pad or book of blank leaves upon which, as they buy or sell, the transaction is noted. These memoranda they send to their offices where the accounts are kept, payments made, and money collected."

"And which, can you tell me, of these thousand busy persons are the 'bears' as they call them, and which the 'bulls'? I see no way to distinguish the two classes, though I so often see them mentioned in the papers."

"These are terms applied to the members merely to indicate which side of the market the broker is on. Take the case of the Williston road as an example. Here are two classes: one interested in raising the price of the stock as much as possible, and the other in keeping it down. The real stockholders, those who now control the road, know that the other people, those interested in the new scheme, want to obtain possession of the Williston road, and must therefore buy up a majority of the stock. The stockowners use every means possible to raise the value of their shares, while those wanting to buy make all possible exertion to keep the price down; the former therefore are the 'bulls' in the market, and the latter the 'bears.' It would require much time to go into a description of the devices and schemes often resorted to by brokers and managers of corporations for influencing the prices of stocks. You may be assured they are numerous. The fact that they are not always strictly honorable, and fair, has something to do with the odium attached to this kind of speculation."

"Then that is the way we come to hear so much about 'stock gambling'?"

"This 'bearing' the market or 'bulling' the market, as they say, may or may not be connected with gambling in stocks. I will try to explain the true gambling feature. Many of the purchases and sales of stocks made at the Exchange are for the future transfer or delivery of the stock dealt in. The transaction is more in the nature of a contract, as the stock is not to be delivered under ten days, twenty days, or thirty days as the case may be. This looks simple enough on the face; but it is that part of the business which opens the doorway to gambling. A broker offers to buy one lot of St. Paul stock deliverable in thirty days at, say, 90. Another broker believes that within the thirty days the price of that stock will go below 90 and therefore presumes he will be able to procure enough to fill the order so as to make a profit, and at once accepts the offer. In this way he sells what he hasn't got, and that which there is no certainty he will be able to get. When the thirty days are up the buyer of the stock calls for a settlement. It has so happened that at no time since the contract was made could the stock be bought at 90. The price now is 91. What, then, is the broker who sold the stock to do? Instead of buying the stock for delivery, he sends to the purchaser a check for the difference between the price agreed upon and the present price of the stock, that is, one dollar per share, or one hundred dollars for the lot. A large share of the business of the Stock Exchange is of this nature. The stocks dealt in do not change hands, and the brokers settle their dealings by the payment of 'differences.' Upon such transactions the public frowns its disapproval, and the courts have repeatedly decided them to be in the nature of gambling operations, and as such to be void in law. Instead of business contracts the public has characterized them as 'bets upon the future prices of stocks.' A large class, it is true, uphold them as legitimate business operations. By the 'public,' I mean the majority of people, and especially, the better element. While performing its legitimate functions the Stock Exchange is credited with its many advantages to the business world. That it should be converted into a pathway of vice is greatly to be regretted. Possibly laws may yet be enacted that will reach and remedy the evil."

"This practice you have explained is not, as I understand, what is termed 'dealings in margins'?"

"That, too, is another evil, it is in fact a part of the evil I have explained, though I did not fully describe this particular feature of stock gambling. In buying stocks to be delivered at a future time it is customary for the buyer to demand a deposit of ten per cent. to insure the fulfillment of the contract. This deposit is called a 'margin.' But the term is usually applied to speculations by people outside of the Exchange, in this way: — A clerk in Cincinnati has saved up a hundred dollars and thinks he will grow rich faster by 'speculating in stocks.' He sends his hundred dollars to a New York broker with instructions to 'buy Louisville & Nashville at 50.' He does not mean buy two shares at fifty dollars each, but instead he wants as many shares at fifty dollars each as his money will secure by paying down only a part of the purchase money. At ten per cent. for the deposit he could 'hold' twenty shares; but out of his money must come the broker's commission. This deposit is termed a 'margin.' Now, if the price of Louisville & Nashville goes down so as to endanger a loss to the broker on the stock he holds for his Cincinnati customer, the young man is notified that he must 'put up further margins' or his stock will be 'sold out.' To save what he has invested (rather, 'bet') he sends on another hundred dollars. Stocks drop again, and again the customer is called on for 'more margins,' but he is unable to comply. His stock is sold and a statement rendered showing the price it brought and how much he still owes his broker. Possibly the broker sold so as to save something for the clerk, and if so it is remitted him. The brokers and New York operators have the 'money,' and the Cincinnatian has the 'experience.'"

"In that transaction would the speculator be 'long' or 'short,' as they say, of the market?"

"He was 'long' of his stock, but, as it terminated, he was 'short' of his cash. The terms 'long' and 'short' apply particularly to time-contracts. When a broker buys stocks for future delivery, expecting of course a 'drop in the market,' they say he 'buys short.' In meeting the contract when it is up, with prices higher than the rate agreed upon, the broker 'covers his shorts' by settling or paying the difference. One 'buys long' when he buys anticipating a rise in prices.

"I think now I have given you a fair inside idea of this great power in the money world. In five minutes the great gong will strike for three o'clock, and in ten minutes not a person of the thousand in this room will you see. I have given you a brief sketch, I know; but while we have been talking a great change has taken place in the Williston enterprise. Five thousand shares of stock have changed hands, at 95, which indicates a change in the control of the property, while the original shareholders must have put into their pockets enormous profits. You will probably soon hear of a reorganization of that corporation, and possibly your friend Vangrift will appear a prominent factor in the new scheme."

As we pass through the long and roomy corridor which we enter coming from the gallery where we have witnessed the exciting scenes of the great auction room we peep into the "bond room." This is a large room nearly square and seated with opera-chairs. Facing the seats are the desks of the officers who read the list and record the sales. Complete lists of all bonds, including government as well as railroad, are "called" twice each day. That is, the names of the securities are read off, and opportunity given those who want to buy to bid. It is not so exciting here as in the general exchange or stock room. Speculation is not so rife, and there is but little fluctuation in prices. The list that is read off is a long one, often exceeding six hundred different securities.

But let us hasten away to the quiet hotel in the upper part of the city where we shall find our young Monarch of Finance who has this day achieved one of the brightest financial successes Wall street has ever witnessed. An important meeting of railroad managers and wealthy capitalists is announced for the evening, and the name of Albert Vangrift the boy financier is familiar to each and all of them. We will soon know who, through the exciting times of to-day, has secured supremacy, and who will stand at the head of the new enterprise.

(TO BE CONTINUED.)

SOME SUCCESSFUL WOMEN.

By Sarah K. Bolton.

X.

CLARA BARTON.

I BELIEVE I have never looked upon a happier face than that of Clara Barton. The unselfish heart, the hopeful nature, the helpful spirit, the definite purpose to bless the world, are all revealed in the radiance of that face.

And hers has been an eventful life. A New England girl, born in North Oxford, Mass., the youngest of a large family, enjoying the glee of snow-sliding, and the gentle gathering of wild flowers in the summer sunshine, she came carelessly to her eleventh year; then a great duty broke in upon this gladsome girlhood.

A brother, by a terrible accident, became for some years an invalid. And to the lot of the buoyant Clara it fell to nurse him day and night for nearly two years, taking only one half day for recreation. Who could know then that the girl was already fitting for heroic deeds by the side of dying soldiers, both in Europe and America; that she was beginning that work which was to make her name forever remembered and cherished? Truly, a hand leads us though we may not feel it, and the way is opened for us to walk in, though we may not see our guide.

When the Sixth Massachusetts Regiment arrived in Washington, from the bloodshed in Baltimore, Miss Barton was among those who met the soldiers at the cars. When they were quartered at the Capitol, she helped secure baskets of food for them, and read to the wounded what the papers were saying of their heroic conduct.

When the war began in earnest, and comforts for the soldiers poured in from the people, many sent direct to Miss Barton, feeling that their packages would surely reach the sons and brothers for whom they were intended. Her own room was soon filled, and overflowed into spacious warehouses; and when the boats went down the Potomac, she was on board with her precious freight for the hospitals.

Late in 1861, she came home to see her aged father, eighty-six years old, who in his youth had served under General Wayne, and was anxious to hear about the work which his youngest child was doing. She told him how her heart constantly ached for those at the front, who lay in suffering on the battlefields, and how she longed to go to them; and the old father said: "Go, if you feel it your duty to go! I know what soldiers are, and I know that every true soldier will respect you and your errand."

But when she offered herself to go beyond the lines, there was no place for her. Woman-like she made a place. She went to Assistant Quartermaster-General Rucker, with tears on her face. His generous spirit responded, for he believed that a true woman could safely and properly go anywhere, and be God's ministering angel, and he gave her a "Godspeed."

And then, says Miss Lucy Larcom, in *Our Famous Women*, in a sketch of Miss Barton's work:

> "We may catch a glimpse of her at Chantilly — in the darkness of the rainy midnight bending over a dying boy who took her supporting arm and soothing voice for his sister's — or falling into a brief sleep on the wet ground in her tent, almost under the feet of flying cavalry; or riding in one of her train of army-wagons towards another field, subduing by the way a band of mutinous teamsters into her firm friends and allies; or at the terrible battle of Antietam (where the regular army-supplies did not arrive till three days afterward) furnishing from her wagons cordials and bandages for the wounded, making gruel for the fainting men from the meal in which her medicines had been packed, extracting with her own hand a bullet from the cheek of a wounded soldier, tending the fallen all day, with her throat parched and her face blackened by sulphurous smoke, and at night, when the surgeons were dismayed at finding themselves left with only one half-burnt candle amid thousands of bleeding, dying men, illumining the field with candles and lanterns her forethought had supplied. No wonder they called her the 'Angel of the Battlefield.'
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> "We may see her at Fredericksburg, attending to the wounded who were brought to her, whether they wore the blue or the gray. One rebel officer, whose death-agonies she soothed, besought her with his last breath not to cross the river, in his gratitude betraying to her that the movements of the rebels were only a ruse to draw the Union

troops on to destruction. It is needless to say that she followed the soldiers across the Rappahannock, undaunted by the dying man's warning. And we may watch her after the defeat, when the half-starved, half-frozen soldiers were brought to her, having great fires built to lay them around, administering cordials, and causing an old chimney to be pulled down for bricks to warm them with, while she herself had but the shelter of a tattered tent between her and the piercing winds."

One of her friends for many years, General J. J. Elwell of Cleveland, O., a brave and noble soldier on many battlefields, gives me this illustration of her bravery:

"Miss Barton once came very near falling into the hands of the enemy rather than abandon a desperately wounded boy. The incident occurred in the retreat of Pope during the several days fighting at the second battle of Bull Run.

"Miss Barton was about stepping on the last car conveying the wounded from the field with the enemy's cavalry in sight, and shot and shell from their guns falling in our disordered ranks, when a soldier told her there was left behind in the pine bushes, where he had fallen, a wounded young soldier, that he could not live, and that he was calling for his mother.

"She followed her guide to where the boy lay. It was growing dark and raining. She raised him up and quietly soothed him. When he heard her voice he said in his delirium, 'Oh! my mother has come. Don't leave me to die in these dark woods alone — do stay with me — don't leave me.'

"At that moment an officer cried out to her: 'Come immediately, or you will fall into the hands of the rebs — they are on us.'

"'Well, take this boy.'

"'No,' said the officer, 'there is no transportation for dying men. We have hardly room for the living. Come quick.'

"'Then I will stay with this poor boy. We both go, or both stay.'

"Both were therefore taken on the car, and the wounded boy carried to one of the Washington hospitals, where his New England mother found, nursed, closed his eyes in death, and took him to his old home, where he rests with his kindred. I heard read a most touching letter, all covered with tear drops, full of expressions of thankfulness and gratitude to the brave, gentle woman who had rescued her son from a lonely death in the woods, and sent him to Washington where she could meet and administer the consolations of a mother to a dying child.

"At another time she had raised a faint, fallen soldier in her arms, and just when she was placing a cordial to his lips, a solid shot or shell took him out of her arms, covering her with his blood.

"On Morris Island, she was the only woman during the siege of Fort Wagner, where she contributed greatly to the relief of the suffering and wounded soldiers. The Island was itself a graveyard, having been occupied first by the rebels and then by our forces. A cup of good water was nowhere to be found. Wells were shallow and the water brackish; almost deadly in its character. The siege was in hot weather, and the climate malarious. Every part of the island could be reached by the guns of Sumpter, Wagner, and other forts. Here Miss Barton stayed, and on the night of the assault when we lost fifteen hundred men in an hour, she was there to succor the wounded. She soon become dangerously ill in her tent. I appealed to her to return to Port Royal, or she would certainly die. Her answer was, 'Do you think I will leave here during a bombardment?'

"After a time, she was carried away, almost by force, to a more healthy locality, where she was ill for a long period. While on Morris Island she helped care for General A. C. Voris of Ohio, General Leggett of Connecticut, who losing his leg would probably have died had it not been for her timely help, and many other officers."

General Voris says: "I was shot with an Enfield cartridge within one hundred and fifty yards of the fort, and so disabled that I could not go forward. I was in an awful predicament, perfectly exposed to canister from Wagner, and shell from Gregg and Sumpter in front, and the enfilade from James Island. I tried to dig a trench in the sand with my sabre, into which I might crawl, but the dry sand would fall back in place about as fast as I could scrape it out with my narrow implement. Failing in this, on all-fours I crawled toward the lea of the beach, which I hoped might shelter me a little, which was but a few yards off. . . A charge of canister all round me aroused my reverie to thoughts of action; I abandoned the idea of taking the fort and ordered a retreat of myself, which I undertook to execute in a most

unmartial manner on my hands and knees spread out like a turtle; I moved toward the rear at the slowest pace possible and say that I made any progress.

"After working this way for a half-hour and making perhaps two hundred yards, two boys of the Sixty-second Ohio found me and carried me to



CLARA BARTON.

our first parallel, where had been arranged an extempore hospital. After resting a while I was put on the horse of my Lieutenant Colonel, from which he had been shot that night, and started for the lower end of the island, one and a half miles off, where better hospital arrangements had been prepared. Oh! what an awful ride that was! A soldier walked along each side of the horse to hold me from falling off. Every step taken sent a pang through my tortured body. But I got there at last, by midnight. I had been on duty for forty-two hours without sleep, under the most trying circumstances, and my soul longed for sleep, which I got in this wise: an army blanket was doubled and laid on the soft side of a plank, with an overcoat for a pillow, on which I laid my worn-out body.

"And such a sleep! I dreamed that I heard the shouts of my boys in victory, that the rebellion was broken, that the Union was saved, that we were a united people again, and that I was at my old home and that my dear wife was trying to soothe my pain; in my rapture I tried to shout, but my throat was husky, my lips parched, and my tongue was unable to respond. My sleepy emotions awoke me, and a dear, blessed woman was bathing my temples and fanning my fevered face; Clara Barton was there, an angel of mercy doing all in mortal power to assuage the miseries of the unfortunate soldiers."

And yet when I wrote to Miss Barton asking for some data for this sketch, she modestly replied: "The humdrum work of my every-day life seems to me quite without incident. The persons who use their brains, tongues and pens for the improvement of their kind, are those of whom biographies may profitably be written. The grand things their tongues and pens have said are accessible, and form a living inspiration to others. But me; I know of nothing remarkable that I have done."

After the war, letters poured in upon her from broken-hearted mothers asking that the burial places of their boys might be found. Talking the matter over with President Lincoln, it was decided that she should go to Annapolis, where the survivors of Andersonville were received, and attend to this correspondence. Three days after the announcement was made that she would be there, she arrived, and to her amazement found four bushels of letters awaiting her.

Soon after this she returned to Washington, established a Bureau of Records of Missing Men, employed several clerks to assist her, and compiled from hospital and prison-rolls, and from burial-lists as complete a record as possible. Later she visited Andersonville, and by the aid of a Union prisoner, who being engaged in hospital service had preserved the prison-rolls, she identified all but about four hundred of the thirteen thousand graves of soldiers buried there, placing a head-board at each grave, and a fence around the cemetery.

For all this work she raised her own money, Congress reimbursing her afterwards, by an appropriation of fifteen thousand dollars. During these four or five years of labor, she lectured frequently both East and West upon experiences of the war, holding audiences spellbound by her eloquent and sympathetic recitals.

In 1869, broken in health, she turned to Europe

for rest, under the shadow of the Alps at Geneva. But there another work was brought unto her very doors. Five years previously, an International Association called the "Red Cross Society" had been formed at Geneva, whose object was the lessening of the horrors of war, by rendering neutral all surgeons, chaplains, and other persons engaged in caring for the wounded, of both friend and foe, extending over them the perpetual shelter of the white flag of truce.

The United States had been solicited to join in this treaty among the nations, but strangely enough seemed indifferent. The leaders of the Society sought Miss Barton, and urged her to interest her country. This she promised to do. But other work was close at hand. The Franco-Prussian war had begun. The Red Cross Committee at Geneva came to Miss Barton again and asked that she go at once with them to the battle-field, and ill though she was, she would not refuse. Her strong executive hand, her busy organizing systematizing brain were felt at once. When Strasburg capitulated and twenty thousand were homeless and starving, she provided materials for thirty thousand garments to be made by poor women, who needed to earn money for their daily bread; then distributed the garments. She aided the starving people at Metz, and the wounded at Sedan. She entered Paris on foot during the days of the Commune, distributing food and clothing to the needy. Once, when, eager for bread, so that the mob overcame the police, she went out of her house and spoke to them; they said "God! it is an angel," and became quiet and orderly.

While in Germany she spent much time with the Grand Duchess of Baden, the daughter of Emperor William, a noble woman, and, like the Empress Augusta, devoted to the Red Cross Society.

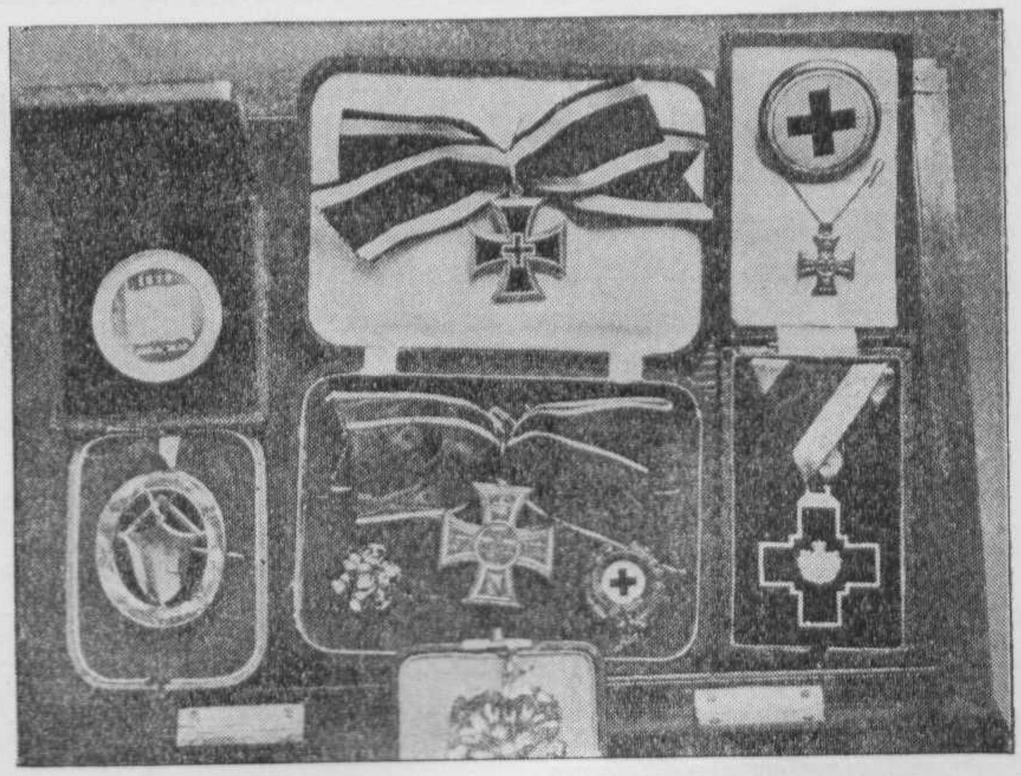
Miss Barton says of this regal woman: "Her many and beautiful castles, with their magnificent grounds, were at once transformed into military hospitals, and her entire court, with herself at its head, formed into a committee of superintendence and organized for relief. I have seen a wounded Arab from the French armies, who knew no word of any language but his own, stretch out his arms to her in adoration and blessing as she passed his bed."

The Grand Duchess gave Miss Barton a beautiful Red Cross broach in gold and enamel, and the Emperor gave her the Iron Cross, given only to those who have done brave deeds on the field of battle.

In 1873 she returned to America, and "though so ill that through years of suffering," she says, "I forgot how to walk, I remembered my resolve and my promise, about the Red Cross Society." By much personal persuasion, the Government was at last brought to join itself to the thirty-one States already in the humane compact, and President Garfield appointed Miss Barton President of the American Association of the Red Cross.

She soon saw the need that in our country the society should act also in time of peace, and she secured an amendment whereby calamities by fire, flood, and other misfortunes could be ameliorated by the aid of the organization.

Such misfortunes came. In the great fires in Michigan, in the recent floods along the Mississippi and Ohio rivers, Miss Barton dispensed the gifts of the American people; now providing seeds for fields, and goods for building homes anew, and now sending a pretty doll with these words pinned to the dress: "Little Florence Jones of Western



ORDERS AND DECORATIONS RECEIVED BY MISS BARTON.

Springs, Ill., sends this doll to some little girl five years old, who has lost all her dollies." Truly, said the newspapers, "The flag of the Red Cross has won the deepest confidence, love and respect from the people on both sides of four thousand miles of river."

After the earthquake in Charleston, Miss Barton at once hastened thither with supplies. While there, being invited to a reunion of the Yates Phalanx in Illinois, she wrote to them:

"And Charleston herself, standing thunderstruck, but still manly, firm and brave, says, with bated breath: 'We are stricken, but it was worth an earthquake to us to receive the sympathy and learn the spirit of our Northern countrymen and women. We never knew them till now; their courage was great, but their magnanimity is greater. We thank God, to-day, that we are one people, and one people we will remain; we would fight harder to stay in the Union than we ever did to get out of it.' General Mann, tell the old 39th this, and that at last they are fully victorious, not only in war, but in peace — they have conquered. Tell them that as I stood in the dismantled dome of Charleston Orphan House, last week, and looked over the bay upon the glittering sands of Morris Island, I fancied us all there again; that in memory I saw the bayonets glisten; the swamp angel threw her bursting bombs; the fleet thundered its canonade, and the little dark line of blue trailed its way in the dark to the belching walls of Wagner; tell them from me, what you will not of yourself, that I saw again their fearless leader waving them on, up and over the parapets into the jaws of death, and heard the clang of the death-dealing sabres as they grappled with the foe. I saw the ambulances laden with agony, and the wounded slowly crawling to me down the tide-washed beach, Voris and Cumminger gasping in their blood; heard the deafening clatter of the hoofs of 'Old Sam,' as Elwell madly galloped up under the walls of the fort for orders. I heard the tender, wailing fife, the muffled drum, and the last shots, as the pitiful little graves grew thick in the shifting sands.

"All this for an entrance into Charleston, and never gained. I turned and looked upon her now, a mass of ruins; there stood beside me the men who had held her forts and manned her guns.

"'Behold what God hath wrought,' I said; and awed as if by Almighty presence, hearts beating low and eyes dim with memories old, we joined hands and picked our way down the shaken staircases to the broken city at our feet."

For a year Miss Barton was at the head of the Woman's Reformatory Prison at Sherborne, Mass., and won the highest confidence. As I was walking with her one evening through the halls, a young convict sprang out of bed, and stood half hidden behind her grated door.

"What is it?" said the kind voice of Miss Barton.

"I heard you coming, and I just wanted to look at you," was the low response.

Passing two large letter boxes, I asked their use. "One is that they may drop letters in to me, that they may tell me anything and everything. They often write because they are so lonesome."

Oh! for such wardens in all the prisons of earth.

"The other box is for letters which they may write to the Commissioners about any complaints they have to make; and nobody can see what they write."

Abundant honors have come to Miss Barton. Queen Natalie of Servia has conferred upon her the Servian decoration of the Red Cross, suspended by red, white and blue ribbons — a compliment to the Union colors. The German survivors of the Franco-Prussian war elected her a member of their society, and sent a beautiful diploma. At the opening of the World's Exposition at New Orleans, a day was given to the Red Cross Society, Miss Barton sending a flag with the Red Cross between the stars. At the last Red Cross gathering at Geneva, she received a great ovation from prominent persons. Among two hundred distinguished guests at an official dinner, Miss Barton was the only lady present. From the Woman's Relief Corps of the Grand Army of the Republic, she has received a Maltese Cross suspended from a bar pin, bearing the name Clara Barton. The red Geneva cross which drops over the ribbon is of California gold, set with a diamond solitaire. In her eloquent response, Miss Barton said:

"And it is neither in vain nor too soon that you learn your lessons, for, whether one will or no, the time is coming in the march of human progress when you will be called to take a part in the direction of the Government under which you live. Desired or not, well or ill, veteran comrades, it is coming. Well or ill, sister comrades, it must be so. The day is marching on when it shall be a part of your duty as citizens to help judge of the welfare of the nation, of the causes and necessities for war, and to say of yourselves wherefor you bear and rear sons. It can no more be stayed than a tidal wave, and my charge to you, my sister comrades, is that you learn your lessons faithfully."

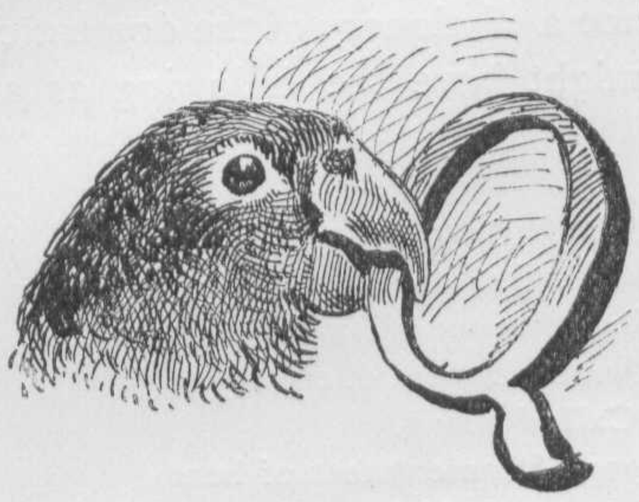
Surely, the world has been made better by the life of Clara Barton.

WONDER-WINGS, MULLINGONGS, COLOSSI, AND OTHERS.

By C. F. Holder.

X.

HOW ANIMALS TALK.



A TALKING BIRD.

QUITE recently an attempt has been made by an eminent scientist in England to make a dog talk, and the methods employed were extremely interesting. Blocks of different colors were identified with certain objects, and in this way it was hoped the pupil could be educated above the average of its kind.

It is incorrect to say "this dog or monkey can be *taught to speak;*" as these animals already have a language of their own, and speak it, and human attempts at their education merely result in teaching the pupils a new language or method of expression.

Such efforts at animal education can be made by any one, and it is often astonishing what advancement the humblest of the learners will make. Object-lessons are best adapted to their faculties, and if success does not always follow it must be remembered that the lower animals vary as to their intelligence just as do human learners; there are the dunces, the lazy ones, and the phenomenal students.

In the selection of animals to be trained, only a few comparatively will be found possessing the requisite traits, and here, too, intelligence is not always the result of breeding. Indeed, it is more apt to appear in mongrel dogs than in the five and ten-thousand-dollar-prize animals of the exhibition. I refer here to the teachable intelligence; and in companies or troups of trained dogs those that develop the greatest proficiency are generally dogs whose pedigree is a labyrinth difficult to trace.

In teaching an animal our language we would first endeavor to show that certain objects meant certain things. Thus if we have a block of a green color with the word "water" painted upon it in yellow letters, and made the dog bring this every time he was thirsty, it would appear that he understood the meaning of the word. But I have my doubts as to this, and believe that the dog associates the highly-colored block with water just as the horse or cow associates the pump with the same; so that while many animals appear to understand certain words, I think they do so only in a general way, and that it is often the inflection or modulation of the voice that has the desired effect.

We must not, however, judge the lower animals harshly simply because we cannot teach them to understand our language thoroughly, as they have their own means of communication as complete and perfectly adapted to their needs as language is to ours.

The lower animals have several different methods of communicating their wants. We will consider first, vocal communication; second, sound signals not vocal; third, talking by touch, by light, and odor; fifth, by signs.

The first method is common among nearly all animals; the whales—though some authorities insist that the whale has a voice—and the majority of fishes being the exceptions. Among birds especially, the vocal speech is understood and admired.

As an example of bird-language, the ordinary domestic fowl presents the most interesting and perfect range, so common that it is rarely considered or reflected upon; not a few will be astonished at the vocal possibilities of the hen if they will give the subject a little investigation.

Knowing that the hen has a voice, we assume that its office is to afford communication between individuals. Half an hour in a farmyard will beyond question demonstrate this, and that certain sounds are the equivalents of words. The crow of the cock is assuredly a challenge, the moment another bird is noticed, and is kept up either in

advance or retreat. It is sounded in the morning in answer to others, and is comparable to the challenge or war cry of many savage tribes, or even the answering shouts of college boys or men, that are unexplainable on other grounds than a challenge of merits.

Observing closely our rooster, accompanied by his family, we notice that the hens pay no attention to the challenge; but let him find some delicacy, he utters a succession of short notes, "Tuck, tuck, tuck, tuck!" upon which the others rush about him eager to share. Again, if a hawk flies overhead, the cock, guardian of the flock, raises his head and utters a prolonged note, as different from the former as possible; "Ka-r-r-r-e," he seems to say, which translated into English means "look out for the hawk! run!" and immediately hens and chickens duck their heads and rush for cover. Now let a dog dart after the head of this family, and listen to the clucks and other sounds coming fast and furious — protests in every intonation.

The hen cannot crow, but she has in other respects as perfect control of language as her master. Indeed, she can sing; purely a self-congratulatory performance expressive of deep contentment and complete satisfaction, heard when hens are let out and they are running for food, and upon warm days in spring it is a "kerr, kerr, kerr," differing in its modulation and intonation in individuals. How different is this from the sharp "cluck, cluck" of the mother-hen. The latter is a general warning to everybody, and plainly says, "I have a young family, and must be let alone." If a grain is found how suddenly this is changed to the quick call, "Tuck, tuck, tuck!" upon hearing which the little ones come rushing pell-mell; and they understand it the moment they leave the shell. Indeed the different notes, or "baby talk," of a hen are of great variety. No one would think of saying that the "cut, cut, ca-da-cut" was a call. It says as plain as words can tell, "I have laid an egg," and the bright little egg-hunter who hears immediately starts for the hay loft, as a favorite hound of mine was in a habit of doing. She understood hen language, and fed upon freshly-laid eggs for some time before I discovered that she was such a linguist. The moment "cut, cut, ca-*da*-cut" was heard she trotted to the hen coop.

When the little chicks are nestled under the mother another sound is heard, a prolonged hoarse "c-r-a-w-z-z-e, c-r-a-w-z-z-e," which I copy from a happy mother in my possession without the aid of a phonograph. Enter a chicken-coop at night, and a soft whistling noise is made, a gentle chirping by the birds, sounding something like "w-h-o-o-i-e," rapidly repeated, that speaks plainly of apprehension. If a chicken is seized by the leg the "c-r-a i-a-i-o-u, c-r-a-i-a-i-o-u" that follows could never be construed into anything but a wail of anguish.

So if we commence a dictionary of the domestic fowl-language we might have the following as a basis:

Ur-ka-do-dle-do-o-o. Challenge of male.
Tuck, tuck, tuck. Food call of male.
K-a-r-r-e. Announcing presence of hawk.
Cut, cut, ca-da-cut. Announcement of egg laying.
Cluck, cluck, cluck. Call of young.
Kerr, kerr, kerr. Song of contentment of hen.
C-r-a-w-z-z-e. Quieting young chicks.
W-h-o-o-i-e (whistle). Expression of apprehension at night.
C-r-a-i-a-i-o-u. Terror and protest at capture.

These sounds of course vary in individuals; that is, in the intonation, as, like persons, no two birds can utter the same vocal sounds.

This can be applied to other birds, and those who have listened to the notes of a robin in its attempts to teach its young to fly, and many other birds, well know something of the range of their vocal resources. Birds differ in this respect. The notes of the owl are a mournful hooting, accompanied by a hiss as a protest. A brown pelican which I kept as a pet, was limited to an asthmatic wheeze. The so-called language of parrots, minor birds, ravens, and bullfinches is merely the expression of an imitative faculty wonderfully developed; their sayings appearing to result from intelligent thought simply because they are often uttered by accident at an appropriate time; but it is needless to say that the birds do not understand what they are uttering, and repeat the sounds, just as a carriage dog places himself between the wheels from habit.

Among the higher animals, as the mammals, we find a wide range of "words," as we will call the sounds uttered. Between the howl of a stray or lonesome dog and its gladsome bark upon meeting its master, there is the greatest possible difference. The musical baying of the hound, the howl of pain, the whining and whimpering, the bark at a foe

are all totally different expressions of as various emotions.

The elephant, one of the most seemingly taciturn of animals, has several ways of expressing its wants and desires, though these sounds have a different meaning imputed to them in India and Ceylon. The shrill cry uttered through the nose or trunk is indicative of rage. Warning is given by one elephant to another by a sound uttered by the lips resembling the word "prut," or the twittering of a bird; and wild elephants have been heard to make a sound resembling that produced by a cooper in hammering a cask.

Elephants often express their pleasure by a squeaking noise, though I have heard the same when they were prodded by the keeper. These animals often purr gently to express their pleasure or satisfaction, the sound being audible to the driver only. Rage is commonly expressed by a hoarse rumbling in the throat, and fear by a reverberating roar; suspicion is conveyed to others by rapping the trunk upon the ground, producing a sound resembling that of tin, being doubled up, which is an example of a sound-signal not produced by the voice.

Reptiles are particularly deficient in vocal sounds. Among crocodiles and alligators the males roar like bulls, and both sexes hiss; but simple as the latter is I am confident that by its intonation it is expressive of different emotions; yet so alike are the utterances in tone that they are perhaps not distinguishable by man.

That the hiss of the snake is a means of communication there can be no doubt. This is well shown in the following letter written me by Colonel Nicholas Pike, late consul to Mauritius, which demonstrates that the mother-snake unquestionably calls her little ones to her. As the letter contains some new and valuable testimony regarding the protection of young snakes, I give it entire:

DEAR MR. HOLDER:

There has been a controversy for years among naturalists relative to the question do snakes swallow their young, and there are many professors of Herpetology at the present day who ridicule the idea. I have been cognizant of the fact for over fifty years. When a boy I began my studies in Herpetology, and was not satisfied with knowing the names of our reptiles, but sought them in the fields, swamps, and forests. I learned much of their habits, and from time to time kept them in confinement, and have reared many. Prof. C. Brown Goode, of the Smithsonian Institute, read a very interesting paper on the subject before the Amer. Inst., for the advancement of Science at Portland, Me., Aug. '73, which ought to have settled the question.

The first time this came under my notice was in July, 1830. I was roaming over the fields when I saw a good-sized garter-snake (*Eutania sirtalis*) very near me with numerous young ones around her. As I approached her she placed her head flat on the ground, opening her mouth and making a *peculiar noise* the little ones evidently understood, for they all ran into her œsophagus. I picked her up by the neck and put her in a bag, and took her home. On examination I found I had about twenty snakes including the mother. They were kept together in a box, and when I told the story to my friends they ridiculed me. It was not long, however, before every person in the house was convinced of the truth of my assertions, from witnessing the fact themselves.

I met with a curious incident some years ago. While hunting snakes in the swamp at Melrose, I came across a male and female striped snake with numerous young ones. The parents were near each other, the family crawling over and around them. I was going for them, when on second thought I concluded to watch them. They did not appear frightened, but went on gamboling about for some time. I went a little nearer when both snakes turned toward me, making a *faint noise*, placed their heads flat on the ground and received the young as stated before. It was a curious sight to see these young snakes not long born, some of them a foot or two away, turn at the noise and instantly seek refuge. I am certain it was a note of warning of danger. I caught both snakes and put them in separate bags. The female had ten young and the male had swallowed five. This is the first instance of any notice of a male snake performing this affectionate duty for its young. I placed the whole family in a box where they lived peaceably a long time.

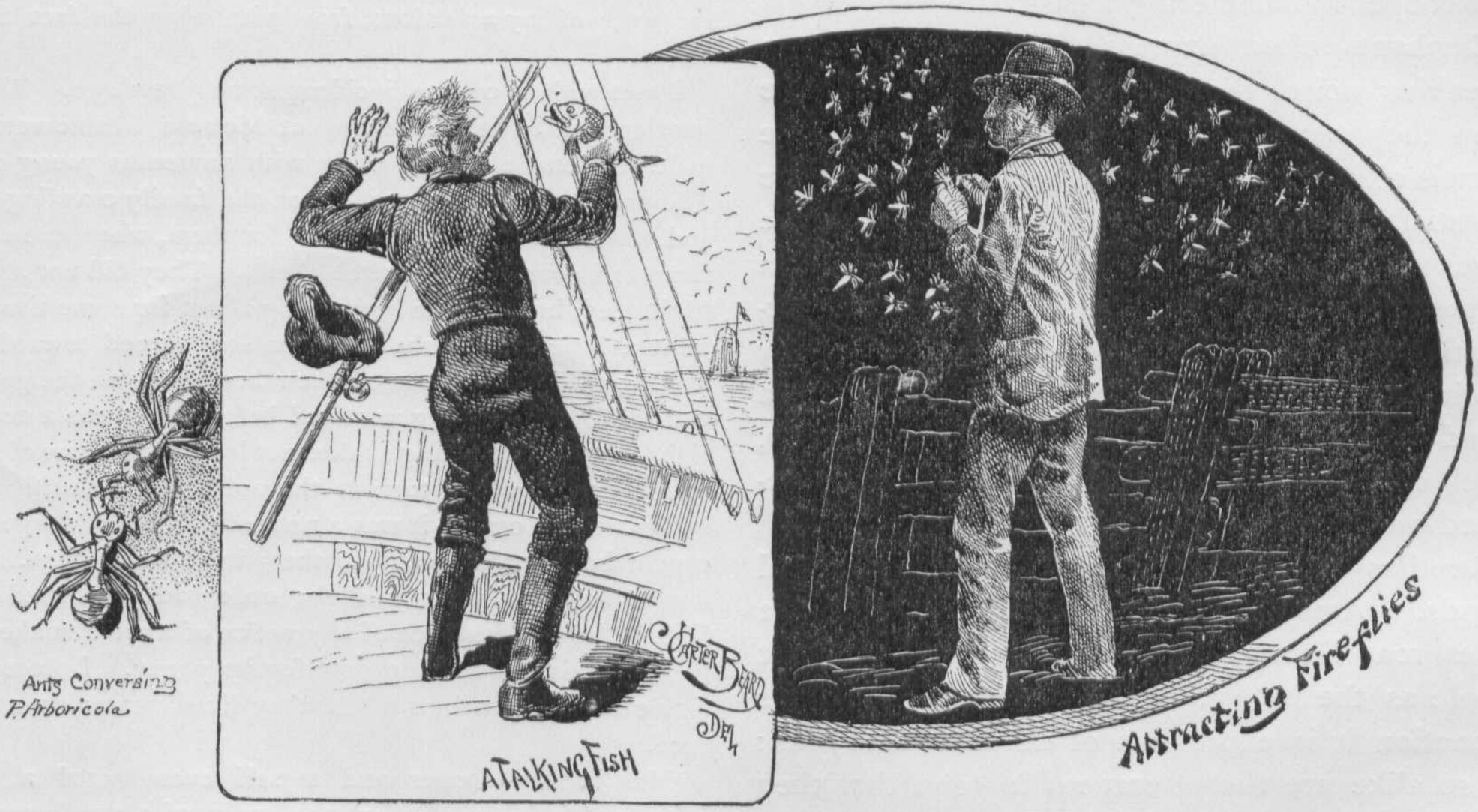
Mr. Julian Hooper and myself encountered a large water snake (*G. sipedon*) on the banks of a small pond in Durham swamp. I was about to capture her when we saw a number of young entering her mouth, and before I could strike her she entered the pond. I immediately swept the pond with my net, and in two or three minutes captured her, but on examination could find no young. She had evidently in that short space of time deposited them under some tussock in the bank out of harm's way. What instinct for the preservation of her young!

I have also seen the *Eutania*, *Sanrita*, *Heterodon platyrhinos*, and the *Crotalus horrida* perform this act for their young. Some rattlesnakes kept in confinement frequently did the same with their progeny when frightened. The beating of a drum near the case seemed to terrify the old ones so that at the first tap they would secrete the young in the œsophagus, and vibrate their tails furiously, and they would not release the little ones till the noise ceased. I could relate numerous instances I have seen where different species of snakes have thus protected their young. I was assured by a Portuguese naturalist in Rio that he had seen a number of the water snakes swallow their young, also a boa constrictor.

Jan. 4, '87. NICHOLAS PIKE.

Whether fishes have a vocal communication is difficult to determine. That they hear is well known, and nearly one hundred species have been heard to utter audible sounds out of water, this probably representing a very small proportion of the finny sound makers. How far such sounds can be heard with water as a medium it is impossible to say, but I have often gone beneath the surface with another swimmer to determine the distance that sound could be heard, and the clinking of rocks was audible many feet, so it would appear its common one "the grunt." It represents a large family, many of which utter vigorous protests when caught. I have heard the dog-fish, a small shark, common on our Eastern coast, utter a loud croak, easily construed into a bark. The little porcupine fish, the cow-fish, a great porgy, and the grouper, common on the outer Florida reef, have all talked to me as I unhooked them.

An English officer, Lieutenant White, has placed on record a wonderful instance where in the China Sea the sounds that came up from the deep were



that there is nothing to prevent the transmission of sound waves.

During an extended stay in the tropics I had many opportunities for observing the habits and ways of unfamiliar fishes, and I shall never forget my first experience with one of these "talkers." I was fishing in the channel, and hauled in a little fish about six inches long, of grey iridescent hues and a very large mouth. The moment I unhooked it, still holding it in my hand, it gave vent to the most remarkable series of grunts and groans I had ever listened to. I tossed it into the boat, upon which its appeals, for so they seemed, were repeated, and that they were not ineffectual is shown by the fact that I quickly returned the supplicant to its native element. That these sounds were expressive of pain and terror I have not the slightest doubt. The name of this talker is Hæmulon, so loud and piercing, so strange and uncanny as to alarm the superstitious seamen. They were described as resembling the clanging of bells, the twanging of a gigantic harp, and the escaping of steam. The notes were continuous for some hours, and were attributed to a school of unknown fishes in the vicinity.

The cuckoo gurnard is said to utter a grunting sound, and I have heard the bark or grunt of one of our common gurnards at a distance of twenty feet.

Aristotle and Ælian both refer to the sound-emitting fishes of the Mediterranean. The Ceylonese fishermen are familiar with a fish, found in the lake of Colombo, which they call magoora, which makes an audible grunt when disturbed, and Pallegoix in his history of Siam refers to a brilliant fish resembling our flounder, that the

natives call the "dog's tongue," which attaches itself to the bottom of a boat and gives out a melody of sounds, though it might appear the contrary to us.

Some years ago considerable excitement was occasioned at Batticaloa, Ceylon, by the report that musical sounds were heard rising from the sea in various places. Sir. E. Tennent visited the locality, and interrogated several fishermen who had heard the noises and described them as sounding the faint sweet notes of an Æolian harp. According to the men the sounds were only audible during the dry season, and they had always known of them, and their fathers before them. They stated that it was not a fish that sang, but a shell or mollusk which they called in the Tamil tongue the *oorie cooleeroo cradoo*, or crying shell; the name evidently being an attempt to reproduce the sound. The men soon pointed out some of the musicians which proved to be the shells known to science as *Litlorina læris* and *Cerithium palustre.* Sir. E. Tennent employed the men to take him to the place, and one moonlight night they rowed him to a spot about two hundred yards northeast of the jetty by the fort gate. When the boat rested in perfect silence, not a breath of wind blowing, he distinctly heard the musical notes. "They came up from the water," he says, "like the gentle thrills of a musical chord or the faint vibrations of a wine-glass when its rim is rubbed by a moistened finger. It was not one sustained note, but a multitude of tiny sounds, each clear and distinct in itself; the sweetest treble mingled with the lowest bass. On applying the ear to the woodwork of the boat, the vibration was greatly increased in volume. The sounds varied considerably at different points as we moved across the lake, as if the numbers of the animals from which they proceeded was greatest in particular spots, and occasionally we rowed out of hearing of them altogether until on returning to the original locality the sounds were at once renewed."

Such sounds have been recorded from several localities in India. A party was once passing from the promontory Salsette to near Sewree in the harbor of Bombay when they were astonished to hear sounds like the protracted booming of a bell, the notes of an Æolian harp, or a pitch pipe, or any long-drawn musical note. They at first thought it music from the shore, but it was soon found to come from all about, and the boatmen said that it was caused by numbers of fishes that were found there. By placing the ear against the rail of the boat the sounds were heard with great distinctness.

Similar occurrences have been reported from the waters at Caldera, Chili, and at the mouth of the Pascagonla creek, Miss.

While the information concerning sound-producing mollusks is very meagre, some investigations have been made. Dr. Grant experimented upon the *Tritonia arborescens* and found they produced a sound under water like "clink;" as if a piece of steel wire was struck against the glass at short intervals. Dr. Grant made his experiments in the presence of the members of the Wernerian Natural History Society of Edinburgh, and the listeners around the table distinctly heard the "clink-clink" of the little Tritonia at a distance of twelve feet, and the combined efforts of hundreds, perhaps thousands, might easily produce a loud volume of musical sounds. I have heard a similar noise proceed from the great conch, *Strombus gigas*, also a clinking; and undoubtedly investigation would show that numbers of marine animals are capable of uttering sounds that have their meaning in the economy of nature.

The fact that innumerable animals are possessed with light-emitting organs suggests the belief that the consequent flashes and gleams of light, often under control of the animal, constitute a sign language. In the case of a fire-fly it has been proven that is used as a signal or call, a gentleman holding one up so that its light was visible, immediately its companions approached it.

In almost every branch of the animal kingdom we find these marvelous light-bearers: fishes, insects, echinoderms, mollusks, worms, medusæ, corals, infusorians, crustaceans, all have their lights, varying greatly in color and intensity.

One fish, *Malacostus niger*, has two gleaming lights upon its head, yellow and green respectively. The Appendicularia, a little degenerate vertebrate, emits three distinct colors; the crustaceans glow with blue tints, and that this wondrous phenomenon has its meaning and use we cannot doubt. It is the sign-language of the lower animals, warning or attracting as the case may be.

SEARCH-QUESTIONS IN GREEK HISTORY.

By Oscar Fay Adams.

X.

GRECIAN MYTHOLOGY.*

181. What Grecian divinity was supposed to be succeeded by Zeus?

182. With what two gods did Zeus share the dominion of the universe, his *supremacy*, however, being recognized in all?

183. What woman endowed by all the gods was the cause of the loss of all the blessings they had reserved for mankind?

184. Who was the queen of heaven?

185. What goddess threw a golden apple among the guests at the wedding of a sea-nymph with a mortal? How was it inscribed?

186. What goddess gave Jason a cloak made by herself, when he set out in quest of the Golden Fleece?

187. What goddess is represented with bandaged eyes?

188. What goddess while stooping to gather a daffodil was borne away to the under world to become its queen?

189. What goddess possessed a magic girdle?

190. In honor of what god was the Colossus of Rhodes erected?

191. To what god were the hawk, raven, and swan sacred?

192. What goddess came every night from heaven to watch over a sleeping youth?

193. What maiden gained a husband by stooping to pick up three apples?

194. What maiden about to be sacrificed to Artemis was suddenly conveyed away in a cloud?

195. What god had a fall lasting nine days?

196. In whose honor were the Isthmian games celebrated?

197. Who became a sea-god by eating grass?

198. What goddess transformed a husband and wife into kingfishers?

199. Where did the Sirens live?

200. What god loved a mortal who incurred the anger of his mother?

* Greek names of the deities are to be given in answer in preference to Latin.

ANSWERS TO JULY SEARCH-QUESTIONS.

141. Philip.

142. His meaning was that bribery was more effectual than open warfare.

143. The rebellion of Chios and other places against the Athenian power.

144. It exhausted the resources of the Grecian states and thus made easier their subjugation by Philip.

145. The Sacred War between Thebes and Phocis.

146. (*a*) All but one of the Phocian cities were destroyed. — (*b*) Sparta was deprived of her vote in the Amphictyonic Council. — (*c*) the Phocian votes in the Council were transferred to the Macedonian monarchs. — (*d*) Philip became entitled to preside at the Pythian games with the Thessalians and Thebans. — (*e*) Thebes recovered all she had formerly lost in Bœotia.

147. The Philippics of Demosthenes.

148. The Battle of Chæronēa fought in 338 B. C.

149. Alexander the Great.

150. Diogenes.

151. Demosthenes.

152. The Chremonidean War so named from the Athenian general Chremonides.

153. Aratus of Sicyon.

154. In being a confederation of tribes, instead of cities like its rival.

155. By the Romans.

156. Its subjugation by the Roman consul Paulus.

157. The conquest of Sparta by the Achæan general Philopœmen.

158. It gave the Romans a pretext for further interference in Grecian affairs and the fall of the League was the ultimate result

159. The Roman power.

160. Achaia.



A YOUNG PRINCE OF COMMERCE.

By Selden R. Hopkins.

CHAPTER XIII.

A RAILROAD SYNDICATE.

WITH fair weather they should reach Liverpool some time this evening, should they not?"

"Yes; and to-morrow they would be in London."

"And what day, papa, have you thought we would meet them in Amsterdam?"

"Let me see. That will depend upon whether or not we shall be able to get away from Berlin to-morrow evening. If I find it possible to leave Berlin to-morrow I shall wire them to meet us in Amsterdam Saturday and to let us know at what time they will arrive there."

Seated in an odd-looking German railway-carriage were the four persons interested in this conversation, while the train at forty miles an hour went flying across a portion of the German Empire. From their dress and manners it was noticeably plain to the other occupants of the carriage-section that the four were American tourists. Americans journeying through European countries are more readily distinguished as foreigners to those people than are Europeans by our citizens upon this side.

The train is nearing the German capital. The little party have had a long and tedious ride across the country from the Russian line. When they left St. Petersburg three days before arrangements were made for several visits at places of interest on the line of journey; and they had not expected to reach Berlin so soon by at least a week. But a message entirely unexpected had overtaken them — a telegram informing them that a person whom all would be delighted to see was that day to sail from New York for Liverpool; he would probably reach Liverpool on the ninth, London on the tenth and thence proceed direct to Amsterdam, to arrive on the twelfth. Furthermore it announced that he would be accompanied by a friend in whom all were interested. By changing their plans the tourists would be able to reach the Dutch metropolis just one day in advance of their young countrymen. It was not more than one hour after this conversation that the train came rolling into the depot at the imperial home of the great Kaiser William, and the following dispatch was forwarded:

Berlin, *June* 10 —

Albert Vangrift,
Langham Hotel, London, Eng.

Happy greeting. All well. Wire me care Baron Stokvis, Amsterdam, hour you will arrive there.

Joseph Crosby.

Now let us step over to the world's metropolis on the Thames. Finding our way to the Langham we make ourselves comfortable in waiting and notice the porters on their circuits with lighters in hand touching the gas jets which announces the approach of evening. Presently a cab is driven up at the main entrance and from it two young men alight, walk hastily inside and direct to the register upon which they subscribe:

Albert Vangrift, New York.
William Warrington, Philadelphia.

This indicates to us an unexpected turn in the tide of affairs, and what, let us ask, does it mean? At the meeting in New York of railroad capitalists interested in the new scheme for continuing the Boston road through to the West, absorbing the Williston line, arrangements were made for constructing a line of road more than two hundred

miles in length, and plans also proposed for the building of several important branches. This great scheme, which would require a capital of several million dollars, had since that meeting been more carefully considered and thoroughly discussed, and a syndicate had been formed through which money for its completion was to be raised.

[In financial affairs the term "syndicate" is used to designate a body of capitalists who unite in purchasing some large quantity of bonds or other securities. This plan often avoids the delay of putting such securities upon the market through the Stock Exchange, and thus finding purchasers. It thus becomes an advantage to both the purchasers of the securities and the corporations offering them. It enables the corporation to procure the money more promptly and with greater certainty; and in consideration of this the purchasers often secure the bonds upon more favorable terms. Besides these advantages a body of persons associated together like an extensive copartnership may be brought together more promptly in case united action should be necessary; and, too, in presenting the prospects of the road its probable earning capacity and other features which it may be desirable to explain to the bondholders can better be accomplished with a syndicate than when the bonds are disposed of promiscuously upon the Exchange.]

Messrs. Wharton and Warrington of Philadelphia had taken an active part in this work. Young Vangrift had been chosen the vice-president and commissioned to form the syndicate and secure the aid of capital in Europe. As a place in which to float his enterprise he had chosen the old commercial city of Amsterdam. He had found it necessary to have the services of an able assistant and had chosen young Warrington, securing for that officer's place in the bank an old friend, competent and worthy.

The success of this mammoth enterprise now largely rested upon the wisdom, energy and business capability of a young man who had but just attained his majority. Upon his management hung the fortunes of many much older and more experienced persons; and his position, besides, was one of great trust. Entirely in his hands and under the direction of his judgment had been placed means for procuring and handling a sum aggregating nearly ten million dollars. This had been done in complete confidence. The young man had thoroughly established a character for honor and faithfulness. In purity of purpose he stood before all who knew him without taint or blemish. He now had a great opportunity to test his intellectual strength. Success in this enterprise would not only place to his credit in commission for his services a fair fortune, but would put him at the head of a profitable organization with a princely salary. In company with his young friend and assistant, though by several years his senior, he has got as far as London on his mission to the great city of the Netherlands. The young men tarry over night in London, receive the telegram from Mr. Crosby and hasten on the next day for their destination.

Arrived in the Dutch capital, a few hours were given up to gladness and gayety, but at an early moment there was a formal consultation with the veteran capitalist upon the object of Albert Vangrift's voyage and visit. Here Albert minutely laid the whole scheme before the prudent Boston financier, at the same time pointing to the little experience he had himself had in such momentous operations and frankly admitting the need of counsel and advice.

"I imagine we shall have no great difficulty," said Mr. Crosby. "I say *we* because I am willing to become a member of the syndicate myself and feel hopeful that my friend Baron Stokvis will unite with us; if he does his name is a pretty sure security for raising our millions; he has an extensive acquaintance among the most wealthy people of Holland."

"It is cheering to hear you speak so hopefully, Mr. Crosby," said Albert. "This enterprise has looked almost audacious to me at times, and I am sure our people who honored me with this commission have felt no small anxiety. They believe it can be accomplished, but they anticipate, I think, that it will require months of energetic exertion and a considerable outlay. We shall of course encounter some obstacles at the best; it will not all be fair sailing."

"That is true, Albert. You will experience a number of difficulties, and there is one you will meet with in the outset. A syndicate holding about ten millions of American railroad bonds are just making preparations to foreclose and take possession of the property. My friend, the Baron, is largely interested. To intensify this unpleasant

feature, some very odd rumors have been circulated here in regard to recent court decisions affecting railroad interests in the United States. Every legislative attack upon railroads which our people over there engage in, and all rumors about interfering with railroad freights and passenger tariffs have a depessing influence upon American railroad securities on this side. I noticed this particularly in London; and while in Paris and in Frankfort I learned of its effects upon the Amsterdam market."

"Then you think this other syndicate trouble will be likely to retard our work, Mr. Crosby?"

"It may have some effect. However, I think the Boston company is organized upon a solid foundation and the amount of capital already invested will have a favorable influence with capitalists here."

"I think I am fully prepared," said Albert, his eyes brightening with the thought of his prudent preparation for what had now been brought to his notice, "for I was careful to bring with me all the laws of Massachusetts bearing on railroad matters and with these also the important court decisions; I think I shall be able to meet all questions on this subject."

[A study of the laws relating to corporations is one of the most interesting branches of modern or ancient legislation. Corporations are created by legislative enactments of a State or the Congress of the United States. They are moulded or controlled both as to what they may do and the manner in which they may do it, by their charters or acts of incorporation, which to them are the laws of their being, and which they can neither dispense with nor alter. They are subject, however, to such laws as may be enacted for the benefit of the public provided they are not unconstitutional. In granting charters to corporations created for the purpose of transporting passengers and freight the State reserves to itself the right to regulate tolls and tariffs which the corporation may charge. Railroads are called often, in law, common carriers. The laws relating to corporations as common carriers are so extensive and far reaching that in any State of the Union they could hardly be comprised in a single volume. The court decisions, too, upon this subject are so numerous that many large volumes are found inadequate for their compilation: and both legislative enactments and court decisions are constantly accumulating in volume and increasing in interest.]

It may be interesting to pause here briefly while we note some of the more general rules applicable to railroad companies as common carriers.

The law regards carriers as of three kinds or classes, which are, *carriers without hire*, *private carriers for hire*, and *common carriers*. The first kind is one who carries passengers or goods gratuitously, or, as we say, for accommodation. Such a carrier in case of loss, damage, or injury to goods, or passengers is responsible only for gross negligence. That is, should you for accommodation undertake to carry a package on a journey and were so careless as to lose it, you would be liable to the owner for damages, if he saw fit to take advantage of the law. A private carrier for hire is one employed for a particular service, but who does not make a business of carrying freight or passengers. Such a person is bound to exercise care and diligence, and is responsible for any injury that may result through any neglect. A common carrier is one whose general business is carrying goods or passengers. Some common carriers presume to transport freight or goods only, some to transport passengers only, and some both goods and passengers. Common carriers of goods are bound to receive and carry the goods offered to them to the extent of the capacity of their wagon or other vehicle or vessel, and to transport them without delay. Such carriers are responsible for goods entrusted to them from the time they receive them until they are delivered at their place of destination and are liable for every injury or loss unless it be occasioned, as the law says, "by the act of God, or of the public enemy." Thus if property be stolen by thieves or taken by robbers or be accidentally burned, though without fault or negligence, they are responsible. The question has often been raised as to what was and what was not the "act of God" as the law puts it, but upon this the opinion laid down by Lord Tenterden, an able English jurist, is generally accepted. He says, "The expression, *act of God*, denotes natural accidents such as lightning, earthquake, and tempest, and not accidents arising from the fault or negligence of man."

In a case which illustrates the rule, the master of a vessel was navigating her into a port with which he was well acquainted. To enter it safely

it was necessary to keep the vessel in range with the lights of two light-houses. It happened that one of those lights was not visible, but a beacon-light upon a vessel that was aground was mistaken for it, and keeping this beacon-light and the one light of the light-house in range the master ran his ship aground and she was lost. There was no negligence on the part of the captain, but it was held that the loss was not occasioned by the act of God as human instrumentality caused it.

The exception of losses coming within the term "by the enemies of the country" embraces such as are caused by acts of warfare committed by States or their citizens with which the country is at war, and by pirates on the high-seas who are regarded by all nations as enemies of all mankind. Thieves, robbers, rioters and insurgents, are not included within the term "enemies of the country."

It is the duty of common carriers to use diligence and to perform their work without unnecessary delay, and also to use every reasonable precaution to prevent injury to or loss of goods entrusted to them. A railroad company received goods to be transported, and while awaiting shipment they were placed in the company's warehouse. This building unfortunately stood in a place liable to be reached by floods of a river running by it, although it was believed perfectly safe. While the goods were in the warehouse, a flood, of a magnitude exceeding any that had occurred in thirty years, came on, reached the warehouse and injured the goods. The company was made to pay damages because as the Court believed it was negligence to place the goods in the warehouse.

A common carrier of passengers, with their baggage, assumes as to the passengers two distinct species of responsibility; one as to their persons and another as to their baggage. Before the introduction of railroads, when passengers by land travelled almost exclusively by stage-coach, the Supreme Court of Massachusetts laid down a generally accepted rule: "That carriers of passengers for hire are bound to use the utmost care and diligence in the providing of safe, sufficient and suitable coaches, harnesses, horses, and coachmen, in order to prevent those injuries which human care and foresight can guard against." Since railroads have come to be the principal means of land travel in Europe and America, and at a rate of speed never dreamed of when stage-coaches were so universally in vogue, the courts both in England and the United States have given the general rule a broader and more stringent application. Some years ago an accident happened to a train through the breaking of an axle and a number of passengers were injured. Suit was brought against the railroad company for damages. The company showed that the car had been built for them by skilful car-builders, and while in the process of building it was carefully examined by an agent of the company, both with respect to materials and workmanship, and again when it was completed was carefully inspected in every particular. It had been in use with safety sixteen months before the accident. The car-builder had obtained the axle from an approved and skilful manufacturer and, also, the defect in it as was shown could not have been detected by the most careful examination nor by striking it with a hammer. The plaintiff showed that the fault in the axle could have been detected while it was being made by a process of bending, and that the company did not so test it. The opinion of the court was that the railroad company was responsible for all defects which might at any time during the process of manufacture have been discovered in any manner, and then remedied, and to the same extent as if the company had manufactured the axle in its own shop and by its own workmen, and if there was any test known which at any time might have been employed to discover concealed defects in the axle, the company was guilty of negligence for not making such test.*

A carrier is required to use diligence in carrying a passenger to his destination and is responsible to him for any injury arising from an unreasonable delay on the route. The question arising in the courts often is as to what constitutes unreasonable delay, and another, the proper interpretation of what is considered due diligence. These peculiar expressions give rise to volumes of legal controversy, and from the mass of testimony with the large number of decisions bearing upon them we observe that the particular circumstances of each case often have an influence upon the opinion of the court.

Some years ago the agent of a company of carriers who formed a line from New York to San

* Hegeman *vs.* Western R. R. Corp. 13 N. Y. 9.

Francisco sold a set of passage tickets good from New York to San Francisco. One ticket was for a passage to the mouth of the Nicaragua River; another from the mouth of that river to San Juan del Sur on the Pacific Ocean, and a third from that place to San Francisco, upon the steamer North America advertised to leave within fifteen days from the time the passenger arrived at San Juan. It happened that the steamer North America was lost before her expected arrival at San Juan del Sur and no provision was made to forward the passenger. Suit was brought for damages against the company. The plea was made that the company was prevented by an "act of God" from keeping its promise, but the court said, "If the loss or wrecking of the steamer North America was the act of God, it was the duty of the defendant to exercise diligence in providing another vessel for carrying the plaintiff. It was wrong and heedless to leave the plaintiff upon the Isthmus to die, or to work his way to San Francisco, or back to New York as he best could. The promise was to carry the passenger in a particular vessel from San Juan del Sur to his destination, and if such vessel had not been lost the defendant would have been obliged to carry the plaintiff in it. But the main thing with the plaintiff was that he was to be carried to San Francisco, and the defendant could by the exercise of due diligence have procured another vessel." For not doing so the company was held liable for damages.

A question which for many years occupied the attention of investors in railroad securities as well as railroad officials and the courts was upon the rights of States to dictate to chartered corporations the rates and tariffs which they might or might not charge for carrying freight and passengers. The railroad companies denied the rights of State legislatures to regulate transportation charges on the ground that such acts were unconstitutional, and were in direct contradiction to their charters. Then the people replied that for the public good it was necessary and proper to limit the powers and privileges of corporations; to impose penalties for their misconduct and to enact such laws as would enable the public to hold them quickly and easily accountable in the courts. That corporations were "artificial persons" and therefore creatures of law, created by law, and subject to law. And moreover, as may frequently be observed, these railroad corporations are successful in securing unusual powers and therefore are naturally inclined to become monopolies, injurious alike to the people and the State. The governments which created them, said the people, may rightly require an obedience to the laws of justice and equity. Thus the war was waged until it finally reached the highest tribunal of the land, where the decision was made settling the right of State legislatures to regulate rates and tariffs of corporations within their own boundaries.*

But this proved to be but a partial settlement of the whole question. Railroads were not confined to one State in their operations, but extended from State to State and their rates of freight and passenger tariffs which extended through several States became the uppermost topic of conversation. Under clause 3 of Section VIII of the Constitution of the United States power is granted to the Congress "To regulate commerce with foreign nations, *among the several States*, and with the Indian tribes."

If this power is granted to the Congress, said the railroad corporations, it cannot be usurped by the State legislatures. Upon this question a most important case was constructed.† Able counsel appeared upon both sides and the case was carried to the Supreme Court of the United States where it was decided in favor of the railroads upon the ground that a State could not regulate interstate commerce. Out of this important controversy came the National Interstate Commerce Law.

In respect to the baggage of passengers, a common carrier assumes the same duty and responsibility as a common carrier of goods. When the baggage-agent of a railroad company receives the baggage of a passenger the company is made responsible and thus insures the safe carriage of the baggage, and its delivery, at the end of the route, against every loss or injury not occasioned by inevitable accident or the enemies of the country. At the end of the route the passenger should call for his baggage. If he does not within a reasonable time the carrier will be relieved from his liability to such an extent that in case the baggage be burned or stolen without his fault the loss will be the owner's.

* 15 Wall, 232.

† Wabash, St. Louis & Pacific Railway Co. *vs.* Illinois.

These few facts which have been pointed out touch only some of the most important laws relating to the rights, duties and liabilities of railroad companies. They are quite sufficient, however, to demonstrate something of the great variety of questions with which our young syndicate-organizer found it necessary to be well informed. He had come well prepared, not only to answer the questions that might be asked by those whom he solicited, but to produce from the records evidences of his correctness. This was of valuable service to him in the Dutch capital, and it was one of the important circumstances which contributed to a speedy completion of his mission.

The syndicate was successfully formed and through it the entire issue of bonds by the Boston company were subscribed for. The arrangement provided that the bonds should be placed in trust in a large financial institution in the city of Amsterdam and that the payments should be made in installments, one fourth cash at the time the bonds were deposited, one fourth in six months, and the remaining half at the expiration of a year.

The president of the company in Boston was immediately notified of what had been accomplished and bills of exchange calling for nearly two millions of dollars were forwarded to America. This good news no sooner reached Boston than the most vigorous operations were begun for the completion of the line of road with the least possible delay. It was the occasion of great rejoicing among the directors and stockholders of the company and the newspapers teemed with glowing accounts of what had been accomplished, in all of which the name of Albert Vangrift was coupled with the grand achievement. At an early meeting of the directors it was unanimously resolved that an ovation, though private in character yet royal in good things and kind words, should be given in honor of the young financier upon his return home from the field of his commercial victory.

Now, during the time Albert Vangrift and his friend Warrington were assiduously working for the accomplishment of the syndicate in Amsterdam Mr. Crosby and the ladies accompanying him were completing their tour of sight-seeing in the Old World in order that they might be ready to return to America by the time it would be possible for the two young men to get their business consummated. But, whether the journey was completed or not, we may as well say, a determination was made by two of the party of tourists that when "William and Albert find it necessary to return we shall be ready to go also."

"Indeed," said Annie Crosby to her companion, "I know you will enjoy the voyage so much more if we go when William does that I shall not say a word about remaining a day longer."

"How very kind," jestfully retorted Tama; "but I wonder if some of that very generous consideration doesn't hinge on the fact that my brother is to return by the same steamer?" And the two charming young ladies, who were the very dearest of friends, enjoyed a merry laugh over their mutual generosity.

A day for the meeting in Liverpool and for sailing from there for New York had been agreed upon. Mr. Crosby and his party were visiting some interesting places among the Highlands of Scotland while the final arrangements in the Boston Syndicate were being perfected in Amsterdam. The preparations for leaving Holland were being made by Albert and William and a tour had been mapped out for the return to England taking in a short visit to Germany and a day or two in Paris. It was the evening before the intended departure when a most singular circumstance occurred. Young Warrington left Albert in his room arranging papers and other things necessary to be put into shape before leaving the hotel and went to the hotel office to inquire for mail, when he was handed this startling telegram:

WILLISTON, MASS., U. S. A. *July* 12—
WILLIAM WARRINGTON — etc. Amsterdam.

Go at once to United States Consul at Madrid and ascertain facts in relation to person there by the name of Charles Vangrift. Say nothing to Albert until you satisfy yourself. We are hopeful from reports that Albert's parents are still alive, but facts must be known before he is made aware of this information.

HENRY HARWOOD.

"Can this be possible?" said William to himself. "How earnestly I pray that it may be true. But how am I to perform this duty and not divulge to my dear friends this thrilling secret! But it *must* be done and immediately!"

(TO BE CONTINUED.)

SOME SUCCESSFUL WOMEN.

By Sarah K. Bolton.

XI.

ALICE E. FREEMAN.

(The following is furnished by a friend of the President of Wellesley College.)

ON the Albany Railroad, midway between Boston and Worcester, stands a group of buildings beautiful for situation, grand in architectural proportions, and perfectly adapted to the uses for which they were constructed. The broad undulating acres border on a lake whose indented shores are covered with stately trees and beautiful villas. The cultivated lawns and gardens which are seen on the opposite side of the sparkling water are filled with every variety of tree and shrub, and every device of landscape gardening. The parterres and terraces sloping down to the water's edge are covered with flowers of every hue, transplanted from every clime, and are such as one might see on the shores of the beautiful Como. Lily-pads cover the surface of Waban water and every wild flower known to New England blooms along the banks. Here the anemones and violets first show their beauty in the early spring, and here in the autumn the purple asters and the brilliant golden-rod linger long after they have disappeared from the neighboring meadows, as if to say, "We cannot leave these shady haunts and walks." The whole scene is one of surpassing beauty and it would seem that nature with lavish hand had prepared it for some grand purpose.

The steward into whose possession all this had fallen, and who had for years been planting his vineyards and trees and preparing the grounds for a family mansion which should crown and complete the picture, had been saying to himself: "Soul, thou hast much goods laid up for many years, take thine ease, eat, drink and be merry." Under the shade of these stately trees he had spent his leisure hours with the beautiful boy, his only son, and heir to all these proud acres. Here with his own surpassing taste he had planned the walks and drives and beautified the lawns.

In an unlooked-for moment this only son was stricken with a fatal disease; one week of sickness ended his earthly life, and his father, the brilliant man of the world, the successful lawyer, at the acme of his fame, in the heyday of life, bowed his head in such overwhelming grief that his hair became white as snow in one short week, and every plan and purpose was changed. His hopes and prospects were buried under the green mound of earth which covered that little form around which all the interests of his life had clustered. Henceforth every tree and smallest flower spoke only of his boy.

Thus bereft, he heard out of the desolate silence a voice like the sound of many waters, a voice which stirred his inmost soul, saying, "I have other work for you to do; let the treasures which I have committed to your keeping be used for fitting other sons and daughters to do the great work which must be done to save this world from sin, and to make its waste places to bud and blossom for other souls as you have made your little spot of earth to bring forth fruit for one. Have I not so loved the world that I have given my only son to redeem it?" Thus called, the ready answer was: "Here, Lord, am I; send me."

For six years this man of God journeyed far and near through the storms of winter and the heat of summer to consult eminent men and women as to the wisest way to use his fortune for the highest and broadest education of the young. At length, after these many wearisome journeys, with utter abandonment of ease and luxury, even of the ordinary comforts of life, his resolution was formed and his life-work begun. In 1872 the corner-stone of Wellesley College was laid; and a structure as beautiful and complete as any in the world has arisen, for the purpose of giving to the daughters of this country a Christian education as broad and thorough.

"Because," said the founder of Wellesley, "educated Christian women have more to do in forming the opinions and making the character of men than all other influence combined, I will

build a hall large enough to accommodate three hundred girls."

His friends smiled at his enthusiasm, and thought in their hearts, "It will be many a year before three hundred girls will want a college education." But he with his prophetic vision believed otherwise. He said, "The young women of Wellesley College shall be taught every thing necessary to make a true woman. They shall be taught that household labor is as honorable as the study of Latin and Greek; they shall be taught that it is honorable and womanly and Christian for a girl



MISS ALICE E. FREEMAN.

whose parents are obliged to sacrifice the ordinary comforts of life to give her an education, to bear some part of that sacrifice." Here again many friends of the enterprise shook their heads and questioned the feasibility of such a plan.

During these years of waiting and preparation, while the towers and turrets of the "College Beautiful" were rising from the hill-tops among the trees, a young girl in a Western town was quietly pursuing her college course and preparing, all unconsciously, for the great work which awaited her.

Miss Alice E. Freeman was born in Colesville, Broom County, N. Y. She is the daughter of Dr. James and Elizabeth Freeman and is the eldest of four children. Her father, with a longing for education which nothing could check, began his professional studies after the birth of his youngest daughter, and the youthful mother, only seventeen years older than her daughter, was left with the care of the farm and the household affairs while her husband studied medicine in a neighboring town; so it will be seen that the daughter is, by an act of predestination, the child of both zeal and culture.

While Miss Freeman was still very young Dr. Freeman removed with his family to the little village of Windsor, a charming spot on the Susquehanna, whose beautiful natural scenery filled the child with enthusiastic delight. She early began to share the responsibilities of the household and became the nurse and constant companion of the younger children; her days were spent in teaching the little ones in the woods and fields the love of wild flowers and of all beautiful things in nature, and this is perhaps the secret of her own enthusiastic love for flowers and ferns and sunset clouds, and this the fountain from which she drew that elixir which has thus far kept her as young in feeling and as fair in face as when she roved over the fields and meadows of the old farm and at six years of age sat down on a mossy bank by the roadside and with the three little children fell fast asleep. With remorseful feelings she hastened with her charge when she awoke, the baby in the little wagon and the other two tagging behind, to confess to her mother how unfaithful she had been, and with what horror she contemplated the possibility that the children might have been stolen by the gypsies while she slept. Thus early she began to take upon herself the responsibilities of life and thus early began that conscientious discharge of life's duties which has worked out for her a character as beautiful as it is rare.

She spent the years of her happy childhood in this picturesque village, and here at the old academy she developed a love for study which made it inevitable that she should desire to go to college. About this time Michigan University opened its doors to women. At once Miss Freeman's resolution was taken. She entered the University soon after, and was one of the pioneers of the

hazardous experiment of co-education. During the four years of her college-life her simplicity and directness of character, her thorough womanly self-respect, her faithful scholarship and earnest Christian spirit exerted an influence which cannot be over-estimated. Miss Freeman graduated in 1876 and after teaching two years in Michigan she was called to the chair of History in Wellesley College. Her success in this department was so marked, though she was but twenty-four years of age, that the founder of the College often said of her: "There is the future President of Wellesley College."

In 1880 the founder of Wellesley College, Mr. Henry F. Durant, died. The same year the President of the College was obliged to leave on account of ill health. In the exigency of the moment, Miss Freeman was invited by the trustees to act as President until some one could be found to fill the place. It had been predicted by wise men and women alike that there was not a woman in the country who could stand at the head of a large and growing college and administer its government successfully.

Miss Freeman occupied the position of President *pro tem* for one year, and so remarkable was her influence in this position, such was her aptitude in governing and such her skill and tact in managing the affairs of the college, that at the end of the year she was invited by a unanimous vote of the trustees to become the President of Wellesley College; the only question being whether with her youth and her delicate physique she would be able to bear the great burden of work which the position would involve. Five years have passed since Miss Freeman took the reins of government. In her administration she has displayed strength and sweetness of character, discernment and wise judgment, ability to govern, and at the same time to influence, and to lead to the highest and best. With the playfulness and simplicity of a child, she has a deep religious nature and the modest reserve of a true woman. The charm of her personality and the wisdom of her methods have won all hearts; her own enthusiasm is contagious and every student regards her as a personal sympathetic friend to whom she may go at all hours for counsel and comfort. She has a clarity of mental vision that is rarely equaled, and a balanced judgment which is seldom questioned; her keen insight into character enables her to detect anything wrong in the life of a girl, and her ready tact and sympathy lead her always to apply the right remedy.

During Miss Freeman's administration the number of students has more than doubled. Four large halls and two cottages have been added and nearly every house in the village where the college is located is filled with students. Last year there were fully one thousand applicants, and at the present moment the number of those who are seeking admission to the college is larger than ever before.

Miss Freeman, though delicate in feature and slight in figure, has a power of endurance which enables her to accomplish a great amount of work. She is working out her own theories, the most important of which she thus states to her girls:

"God has made you after his own plan, and He places you just where He wishes you to work with Him to bring about the highest results for yourself; He has given you every opportunity. Make yourself what you will — remember it lies with you. God can make no mistakes."

One who has known her for many years says of Miss Freeman:

"She is especially esteemed for her quick sympathies, her sincere enthusiasm, her devotion to the cause of higher education, her capacity in carrying out her convictions, and particularly for her most lovely Christian charity which creates an atmosphere of purity and earnestness throughout all her work."

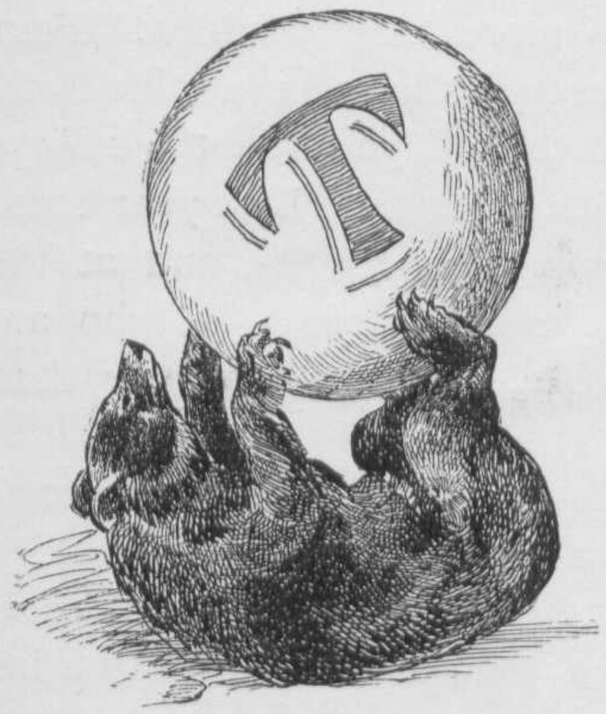
Her Alma Mater, in just acknowledgment of her work, has conferred upon her the degree of Ph. D. Columbia College on the occasion of its semi-centennial conferred upon Miss Freeman with other distinguished literati and educators the degree of Doctor of Letters.

WONDER-WINGS, MULLINGONGS, COLOSSI, AND OTHERS.

By C. F. Holder.

XI.

THE SPORTS AND GAMES OF ANIMALS.



Malayan Sun bear playing with a ball

O those who have cared to watch the actions of the various animal forms which frequent woodland and stream it is evident that they not only have a sense of something akin to humor, but have games and sports with which to pass the time away.

Naturally this is more noticeable among young animals. Particularly sportive are the fishes, though this is not generally known from the difficulty in making observations, as these odd playfellows will not indulge in their pranks if aware of being watched.

One of the most fascinating pastimes that I ever engaged in was to play the spy upon a submarine fish-village; and many a curious performance did I witness. My point of observation was an old wharf not many miles from the city of Havana. It was built out into the Gulf Stream, but long ago had fallen before a teredo, and its piles had crumbled until it rested just above the water like a hugh raft ready to be launched.

In this warm country shade was acceptable to even shore-loving fishes, and beneath the protecting shadow of the old dock large numbers of what I soon began to term "my finny friends" would congregate. The planks were everywhere pierced with auger holes to let off water in the days when the wharf was in use, and by lying flat and applying my eyes to these port-holes I looked down upon the neighborhood unobserved. The shore here was a pure silvery sand, quite sloping, so that it afforded an extended field for observation; the inshore portion of about twelve feet being the resort of small fishes, while from there to the channel large forms made their headquarters.

Almost the first impression received from watching these fishes was that they were domestic; in other words, they had a home life. As soon as I learned to distinguish certain ones I found them day after day about the same stumps or posts, never venturing far away. The fishes which made up this suburban settlement, seemed to be of infinite variety; but perhaps altogether there were twenty or thirty different kinds, including the stragglers which came in from time to time, perhaps on a visit, from an old wreck that was another favorite spot not one hundred feet distant. There were angel-fishes in gorgeous garbs of yellow, blue, and black; snappers of rich brown hues, and their cousins, the grunts; some striped black-and-white, others mottled with old gold and vermilion, all together a very brilliant assemblage. Then there were minute fishes resembling a sapphire in color, actually scintillating as they darted about, also cow-fish with veritable horns, doctor-fish with lancet ready, an occasional semora with its curious sucking disk, the lithe barraconta, the spiny porcupine, and many more.

There always appeared to be the best understanding between these villagers, if I except the barraconta and the doctor-fish. The former was apt, when no one was looking, to move silently and slowly in shore, and pick up and devour an infant fish; while the doctor had a habit of trying to lance any one that came too close. But among so many these were not very disturbing elements, and to the little fishes especially every day was a holiday, and to eat and enjoy themselves was the one object in life.

A game of tag was perhaps the commonest performance. One little fish would dart at another, and then be joined by several others, until finally a dozen or more would be seen following the leader, who darted around the piles and posts, finally joining the throng to in turn chase some other fish which seemed now to be selected as

"It." Sometimes "It" was caught; but there never was the slightest roughness to show that anything but pleasantry was the object, and when a playfellow was "tagged" that ended it; the game either being stopped or the chase transferred to another fish. I rarely visited the fish village but such a game was going on.

Very often in midday, when the sun was beating down fiercely, a large school of sardines, little fishes allied to the herring, would take shelter beneath the old dock. Packed side by side, thousands upon thousands would lie with their heads in one direction, all taking a midday siesta, as the naps of fishes go. So large were these schools that they sometimes entirely filled the space beneath the platform and hid the real residents from view. As they, too, were young fishes, it is not strange that they should indulge in games, and, like the others, they had their games of "tag" and "chase," often hundreds joining in the sport.

But the pastime most affected by these silvery creatures was that of jumping; this seemed to be entered into with the greatest enjoyment and spirit. The leaping was of course not done under water, but as follows: as the tide rose the sticks and twigs that had been stranded were floated off, and soon drifted out to the school. As soon as a stick was observed by the argus-eyed throng, a score or more would dart at it, and with a frisk of their tails, a splash and clatter, over they would go, out of the water, clearing the float with all ease imaginable. Others would follow, and I noticed that those who once performed the feat returned again and again; showing that it was a matter of decided enjoyment. Sometimes when a supply of sticks was on hand a dozen of these games would be going on at one time.

I frequently observed the fishes taking curious positions in the water without apparent purpose. Some would poise with head down, allowing themselves to gradually float upward until the tail touched the surface, then dart off with great velocity, just as if they had been "playing 'possum." Others would swim round and round in a circle, or take a number of short leaps out of the water, making a hop-skip-and-jump movement. Personal contests, seemingly in play, were often carried on. One fish would seize another by the side fin, and the two would swim about and struggle for some time, until, perhaps, another fish would interfere.

Such performances as leaping out of water are not confined to small fishes. I have seen large rays do this, coming down with a crash that could be heard for a mile. The breehing, as it is called, of the whale, though not a fish, probably comes under the head of playfulness, and their nightly gambols are a common sight to whalers.

While it is extremely difficult to train fishes, I have made them participate in what might be termed a game, and the sport can be carried out indefinitely. The fishes which I experimented with were a common Northern sunfish and a tri-tailed Japanese fish. I bought the former because it had a reputation for pugnacity; its owner averring that it killed all fishes placed in the tank with it. I thought this a mistake; but after losing several triple-tailed Japanese fishes I found that my sunfish was a veritable bully and was determined to have a tank by itself; so I accordingly divided off the aquarium by a glass partition, and put the tyrant in close confinement. Being a courageous fish it did not require much instruction or training, and soon not only fed from my hand, but would leap some distance out of the water for flies and other articles of food, and finally came to expect its supply, darting to the surface the moment I approached the tank. This familiarity was the occasion one day of a laughable accident to a pet kitten. Feeling thirsty she sprang upon the top of the aquarium, and balancing herself upon the edge began to drink. But the moment her red tongue touched the water the sunfish saw it, and darted to the surface, and the next second had the tongue firmly in its mouth. It is difficult to tell which was the most surprised. The kitten gave a howl, lost her balance and fell into the tank, from which after floundering about a moment she clambered, and with a wail of terror darted from the room, leaving the fish, that had found out its mistake, rushing about with fins erect equally demoralized.

This, however, did not deter the sunfish from darting at everything; and this readiness to bite all objects suggested that fish-power might be experimented with; so a mimic belfry was arranged over the aquarium and the bell-rope allowed to hang over the water. This can be done by any one, and if to the string a bit of meat be attached, the fish will seize it, and in its attempts to detach it will ring the bell. By finally replacing the meat

with a colored pebble the fish can be taught to ring for its own dinner, and if it be one of the curious tri-lobed gold-fish found in almost any collection, the performance is a very attractive one.

These entertainments can be extended indefinitely. Small cannon can be fired by having the fish pull the lanyard, windmills can be worked, music-boxes wound up, mimic engines started; in fact many devices invented for the edification of young people. A miniature mermaid can be floated upon the water, or a marine jumping-jack, and the fish will pull the string that is dangling below, giving the figures an extremely life-like appearance.

That insects have their games and sports I am convinced. This first occurred to me while in the Adirondacks some years ago. I was some distance in the wilderness, and having found a small clearing was resting from my climb, when suddenly the sun, that had been obscured, sent a band of light through an opening in the trees and at once transformed the spot into a veritable fairyland. From all about innumerable forms of insect life seemed to spring into the gladsome light, and soon the great sunbeam was the scene of such revelry as is only imagined by tellers of fairy-stories. A band of gnats, or insects resembling them, seemed to be performing some mystic dance. They floated on the beams of light; rising and falling in undulating lines, forming and re-forming, now disappearing, as if at some preconcerted signal, only to appear again in some new shape. So regular and exact were these movements that I was impressed that they had some meaning. In and about this band of players various other forms were darting. Such games of tag! such aerial leaps, dives and plunges! all showing that this sunbath was being enjoyed to the utmost extent.

Once when lying on the rocks that face the ocean not far from Nahant, I was attracted by a curious clicking sound, first on one side, then on the other; as if a system of signaling was going on. Recognizing the note of one of the locust tribe, I carefully turned and saw half a dozen large rusty-brown fellows, commonly known as grasshoppers, which so exactly imitated the rocks in color that it was with the greatest difficulty I distinguished them when not in motion. It was apparent that they were engaged in some curious performance, as they were marching about in the most erratic manner, dodging and hiding behind pieces of stone, and exhibiting remarkable acuteness in avoiding each other. All the little irregularities of the rocks were carefully taken advantage of, and their motions in creeping upon one another reminded me of those of a cat, so stealthy and sly were they. This game of hide-and-seek was occasionally varied by a leaping performance. Two locusts would gravely face each other, and then as if at a given signal they would jump into the air, one passing over the other in the flight, alighting and assuming the same positions only reversed. I watched their manœuvres for some time, and listened to the curious clicking that accompanied them; but finally an incautious movement broke up the games, and the players flew away, seemingly uttering vigorous protests.

The love of sport is not confined to these lowly creatures. I doubt that an animal can be found which does not in some way or at some time show a desire for what we term "amusement." Among the land animals, or rather the land and water animals, the otters are especially noticeable from the fact that some of their games are exactly like those of human device. It was Audabon who first chronicled their actions, he having watched them from a secluded spot, and since then their games have been enjoyed by many observers. The otters (*Lutra Canadensis*) are perhaps the originators of the games of sliding down hill and tobogganing.

Otters are always found about streams; building their tunnel-nests in the banks, having, as a rule, one entrance into the water, and another on shore. During the winter a bank is selected having a good incline and leading into the water or sometimes out upon the ice. The snow is then carefully patted down and rendered as smooth as possible, and finally becomes a glare of ice. This accomplished, the otters start at the top of the hill, and turning upon their backs give themselves a push with their hind feet, and away go the living sleds, dashing down the incline, turning at the bottom and with a splash entering the cold water, or darting away on the smooth ice. So fond are the animals of this sport that they keep it up for a long time, and hunters watch the slides, knowing that here they have the best chance of finding the otters.

The sea-otters are just as playful. They are found lying on the great kelp-beds off shore, and

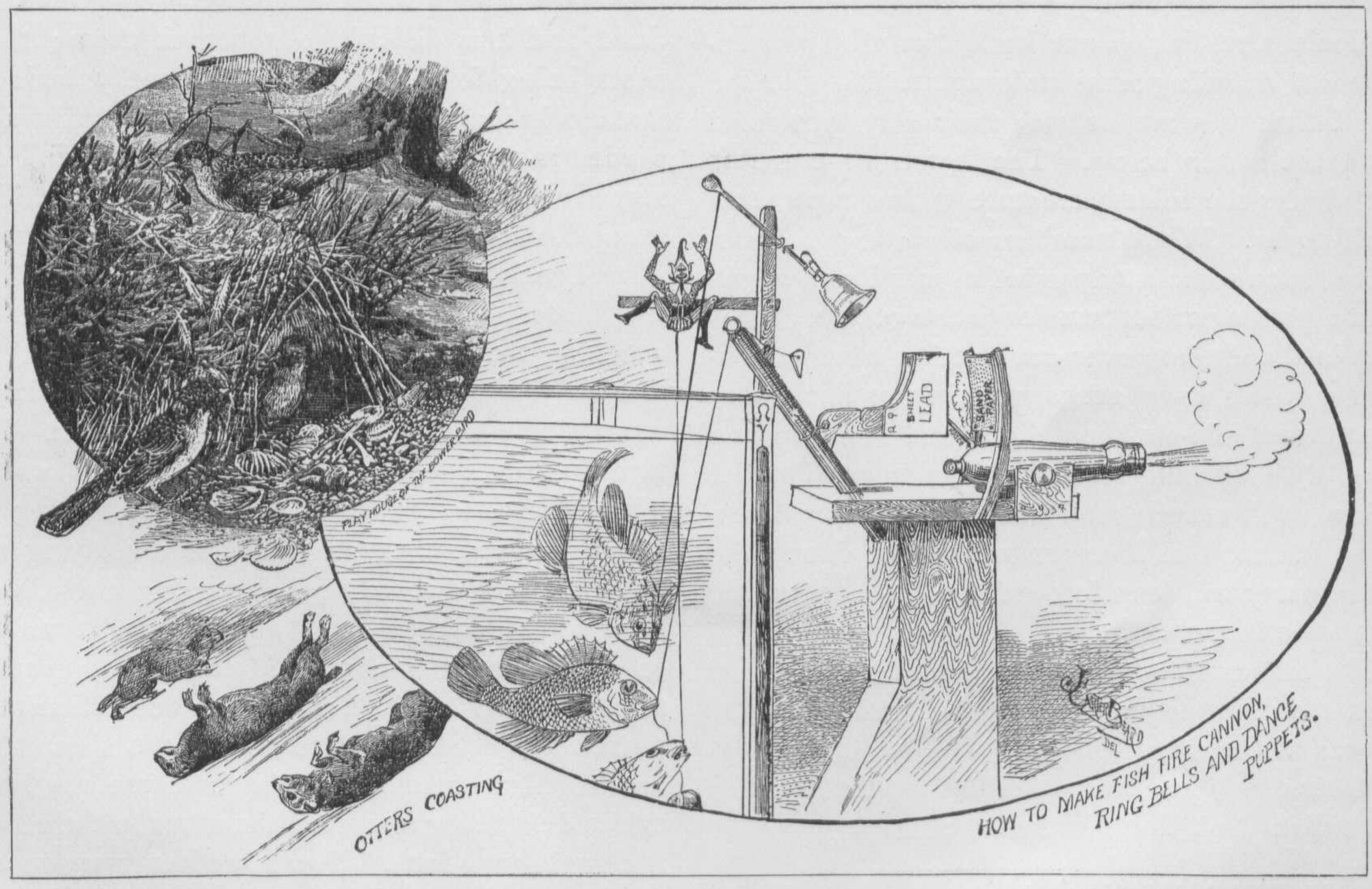
have been seen tossing their young into the air, riding on the breakers upon their backs, and going through a number of motions of an extremely interesting nature.

That these occurrences are truly games, one needs but to watch the domestic cat and her kittens; and young lions, tigers, and all the cat tribe have similar dispositions, while if we turn to the monkey its entire existence is seen to be a continuous game, or an endless series of practical jokes perpetrated upon its fellows.

The Malayan sun bear is remarkable for its fun-

crabs, known as fiddlers (from the fact that one claw is of enormous size, comparatively), were marching about in what appeared to be regular order. There must have been several hundred, and with the great claws held aloft they were wheeling, backing, marching and counter-marching; making no attack upon each other, but moving about in a solemn array that undoubtedly gave some satisfaction to the participants.

Among birds we find many instances of this love of sport. Quite recently a European naturalist made an extensive trip through Peru, paying spe-



ANIMALS AT PLAY.

loving nature. A log of wood will serve to entertain one of these little creatures, and enable it to perform the most grotesque and curious antics. The common black bear is almost equally playful; and its rough-and-tumble games in a treetop are some of the most interesting performances I have ever witnessed.

Even crabs appear to have a sense of humor, and to go through certain manœuvres presumably games. I remember once in Florida in crossing a long marsh to have come suddenly to a spot not covered with grass, where an immense number of

cial attention to birds, and one day while sitting beneath a low tree he saw several humming-birds (*Loddigesia mirabilis*) approach a limb and alight just above his head. While watching them he observed them leave the perch, at the same time two of their tail feathers spreading out so that one extended upon one side, and one upon the other, and although in mid-air the birds still appeared as if they were on a perch, or were holding in their claws a feather. Instead of flying away they took positions in the air, one above and one below the branch, and there remained several minutes, rising and

falling, and occasionally changing places when they would return to the branch to rest, then continuing the curious performance which the naturalist was convinced was some game. As the tiny creatures poised they resembled gems of dazzling appearance. The crests were a vivid sapphire blue, changing in different lights to various shades of violet; the breast feathers were a golden green, while about the feet were ruffles of pure white.

As a rule the cranes and herons are the most dignified of all the bird-creation, especially when observed in the haunts of their choice — generally the desolate marsh where the approach of an enemy can be readily seen. Here they stand motionless, resting on one leg, either asleep or engaged in deluding some unfortunate fish into the belief that they are, or with their fiery eyes fixed upon the water below. The heron or crane is not always the solemn creature it thus represents itself to be. When numbers of them gather together upon some sandy point, especially on moonlight nights, a perfect transformation occurs. They leap in the air, hop over one another's backs, contorting their long necks, pecking at imaginary enemies in mid-air, then alight and stalk up and down with mincing tread. Sometimes a number of birds will remain motionless while one will perform, and then, as if eager to join the dance, the entire party will leap forward, and a scene ensue laughable in the extreme.

The cranes of other countries indulge in games even more grotesque than those described. The dances of the demoiselle or Numidian crane (*Antropoides virgo*) are thus described by the Russian naturalist, Prof. Von Nordmann:

"They arrive in the south of Russia about the beginning of March, in flocks of between two and three hundred individuals. Arrived at the end of their journey, the flocks keep together for some time, and even when they have dispersed in couples, they re-assemble every morning and evening, preferring in warm weather to exercise themselves together, and amuse themselves by dancing. For this purpose they choose a convenient place, generally the flat shore of a stream. There they place themselves in a line, or in many rows, and begin their games and extraordinary dances, which are not a little surprising to the spectator, and of which the account would be considered fabulous were it not attested by men worthy of belief. They dance and jump around each other, bowing in a burlesque manner, advancing their necks, raising the feathers of the neck-tufts, and half unfolding the wings. In the meantime another set are disputing, in a race, the prize for swiftness. Arrived at the winning-post they turn back, and walk slowly and with gravity; all the rest of the company saluting them with reiterated cries, inclinations of the head, and other demonstrations which are reciprocated. After having done this for some time, they all rise in the air, where, slowly sailing, they describe circles, like the swan and other cranes."

It would be difficult to find a more demure bird than the cock-of-the-rock (*Rupicola*) of South America. It is a little smaller than a good-sized pigeon; the males are of a rich bright orange, with plume-like headdresses, and so beautiful withal that a former emperor of Brazil had a state robe made from the skins. The female bird has a dark-brown suit, and is not so attractive. The birds are timid, and it is difficult to approach them; their nests being formed up near the rocky beds of streams in inaccessible places. A naturalist succeeded in stealing upon a flock, however, and observed what might be termed a "bird-circus." The group consisted of eight or ten birds, standing upon a large rock in a ring several feet in diameter. All the birds faced the center, and were evidently watching the performance with the greatest interest. The entertainer of this feathered audience was a single bird which stood in the center. Extremely sedate in all its actions, it moved about, lifting its claws as high as possible, bowing its head, and spreading its tail, thus displaying the black markings, marching around in a circle, leaping solemnly in the air, and going through a variety of ludicrous manœuvres. After the bird seemed to have exhausted its powers as a contortionist, it retired and took its place among the spectators, another bird or actor stepping into the ring, and evidently striving to exceed the other in the eccentricity of its motions. Now some imaginary enemy was attacked, and violent pecks and wing-strikes made at the empty air, the performer wheeling about, darting quickly this way and that as if avoiding the adversary's blows until, exhausted, it fell back into the line giving way to a fresh performer.

The games of many birds are aerial, and present grand spectacles, wonderful exhibitions of flight. Such, for instance, are the evolutions of the great English bustard, whose rushes and movements in mid-air are extremely remarkable for so heavy a bird. Rising upward, as if intending to leave a certain locality, it suddenly swoops down with the velocity of a hawk darting upon its prey. Down it comes, the wind whistling about its wings.

A second more, and it will strike the ground, but suddenly its wings are spread and its headway is stopped. Then begin a series of contortions and movements that defy description. The great bird seems poised by some other agency than its wings, so strangely are they employed. Finally when thoroughly exhausted, it alights and joins its comrades who have been interested observers of the performance.

In all these instances there has been no special place selected as a playground, any locality suiting the purpose; but by a number of birds found in Australia playgrounds are built with as much care as those intended for human use. One of the most interesting of these playhouse-makers is known as the *Ptilonorhynchus holosericens*, and its actions have been carefully observed by Mr. Coxen, of Brisbane, New South Wales, and a specimen of their playhouses placed by him in the Natural History Museum at Sydney. In the erection of its house the bird displays great care. A level spot is selected, well-concealed, and in a locality free from interruption. Then a number of twigs are taken and placed upon the ground in parallel rows, and then carefully interwoven; this forms the flooring. Other twigs are now collected, of a little finer quality, and these are inserted in the sides of the platform, the tops being pushed together so that they join and form the apex of a roof. These thatches are skillfully woven in and out, until the roof is secure and in some cases water-tight. The arbor or hall so formed is from two and a half to three feet in length. The bird then proceeds to furnish the house with toys. There are bright objects of all kinds: gaudy shells of snails, bright feathers, bits of colored glass found near camps, brilliant insects; in short, anything of an attractive nature. These playthings or ornaments are distributed about the floor, some hung upon the branches, and when all is arranged the collector invites its mate into the arbor or hall, and the birds amuse themselves by picking up the toys and changing them about, and by running in and out. This playroom is in a different locality from the nest, and should not be confused with it.

Some years ago several specimens of the satin bower-bird were brought from Australia and exhibited in the London Zoölogical Garden where they afforded much entertainment and amusement by their strange actions. Dr. Sclater says:

"Long before the construction of their nest, and independently of it, these birds form with twigs, skillfully put together and firmly planted in a platform of various materials, an arbor-like gallery of uncertain length in which they amuse themselves with the most active glee. They pursue each other through it; they make attitudes to each other, the males setting their feathers in the most grotesque manner, and making as many bows as a cavalier in a minuet. The architecture of the bower is exceedingly tasteful, and the ornamentation of the platform on which it stands is an object of constant solicitude to the birds. Scarcely a day passes without some fresh arrangement of the shells, feathers, bones, and other decorative materials, which they bring from long distances in the bush for this purpose. With the same object they immediately appropriate every suitable fragment placed within their reach when in confinement."

In one of these playhouses, in the Museum of Comparative Zoölogy at Cambridge, England, of these *Chlamydodera nuchalis*, the decorations or toys alone amount to half a peck of material, composed mostly of a large white univalve, the shell of a land snail, in all about four hundred of them; the rest being shiny flints, agates, highly-colored seeds and pods, bleached bones, etc.

The bower or playhouse of *C. maculata* is often four feet in length and two in width. In this case no floor is made, the twigs being merely thrust into the ground in a regular row opposite each other, and allowed to fall together at the top.

The Zuiscalus or Sanate, a bird resembling the magpie, found in Central America, has if not a sense of humor something very much akin to it. At certain times a number will meet and perform for the edification of others, dances, and games of a very entertaining nature. At one moment they will stand twisting their necks into seemingly impossible positions, ruffling their feathers, then walking slowly ahead, stopping suddenly and tipping the long tail up so that it almost strikes the head, conveying the impression to the observer that the performer had suddenly realized that its movements were not exactly dignified. These bird antics are often seen on the tops of houses.

The ants, which many authorities, notably Sir John Lubbock, rank next to man in point of intelligence, though extremely busy and hard-working little creatures, have their times of relaxation, and have been seen by close observers engaged in performances which were undoubtedly games.

So through all animal life we shall find that the various members have hours of relaxation, in which games and sports are the natural outcome.

SEARCH-QUESTIONS IN GREEK HISTORY.

By Oscar Fay Adams.

XI.

GREEK LITERATURE: POETRY.

201. How were the Iliad and Odyssey transmitted from one generation to another in the earlier periods of Greek history?

202. State briefly the distinction between Homeric and Hesiodic poetry.

203. Relate briefly the subjects of the Iliad and Odyssey.

204. Mention the three works generally ascribed to Hesiod.

205. From about what period is the beginning of Greek lyric poetry dated?

206. What great lyric satirist flourished about 700 B. C. and in what metre are his satires written?

207. How did the Greeks regard lyric poetry?

208. Two noted lyric poets were natives of Mytilene and the metres they invented bear their names; who were they and what were these metres called?

209. What famous lyric poet is said to have been choked to death by a grape-stone?

210. What lyric poet gained the prize for an elegy upon the warriors who fell at Marathon?

211. Of what lyric poet is it related that a swarm of bees rested upon his lips while he was asleep?

212. What great poet is said to have been killed by an eagle who dropped a tortoise upon his head in order to break its shell?

213. Of what is he regarded as the founder?

214. Name the seven tragedies of Sophocles.

215. What great tragic poet is said to have been torn to pieces by the dogs of King Archelaüs of Macedonia?

216. Name the most famous writer of Greek comedy.

217. Name two poets who founded the school of New Comedy which entirely excluded politics from the stage and took its materials from purely imaginary sources.

218. Who invented pastoral poetry?

219. Name two noted contemporary poets who adopted his style.

220. Where did Callimachus live?

ANSWERS TO AUGUST SEARCH-QUESTIONS.

161. The need of shelter from the weather.

162. To religion.

163. Dr. Henry Schliemann. See *Tiryns*, *Mycenæ*.

164. Base, shaft and capital.

165. The Corinthian.

166. The temple of Diana at Ephesus.

167. The temple of the Olympian Jove at Athens.

168. The Parthenon.

169. The Doric.

170. The Dionysiæ theatre on the slope of the Acropolis at Athens.

171. In the Lyceum, a gymnasium dedicated to Apollo Lycēus.

172. About 550 B. C.

173. Up to this time the only statues were those of the gods, in carving which certain fixed types of posture and feature were followed. The statues of men afforded greater scope to the inventive powers.

174. About the opening of the sixth century B. C.

175. Dipœnus and Scyllias. About 580 B. C. in Sicyon.

176. The statue of Jupiter Olympus.

177. Scopas and Praxiteles.

178. Euphrānor and Lysippus.

179. Apelles.

180. The Laocoön in the Vatican at Rome.



A YOUNG PRINCE OF COMMERCE.

By Selden R. Hopkins.

CHAPTER XIV.

FORTUNE'S CROWNING GIFT.

I FEAR he has met with some sad fate."

"How long did you say since he disappeared?"

"It is now nearly four days. It will be full four days this evening."

"And no tidings?"

"None whatever."

"What is *your* theory?"

"I don't know that I have one. I can conceive of no circumstance that could keep him so long away; certainly none that could have made him so long silent if he were alive or able to communicate with me."

"You are satisfied he has left the city?"

"I know only what the police have told me."

"Had he money?"

"He had charge of money, and in his possession had either cash or checks to a considerable amount."

"Was it his own or other people's?"

"That is a consideration which cannot enter into the subject of his disappearance. William Warrington is the soul of honor. Money would be no temptation to him. The note he left is all the evidence I want that he was called away and intended to return before I would grow uneasy. You can read it."

This is the note which the Amsterdam detective read:

Dear Albert:

I am leaving the city in haste and on important business. There are only a few minutes before I must get the train and I cannot see you. Do not be alarmed; will explain when I return. Have taken with me the deposit certificate for two thousand florins; the draft on London for £500 you will find in the hotel safe. William.

"I have made inquiries at the bank," continued the American, "concerning the certificate. It has not been cashed. They have agreed if it be presented to send me word immediately and if it is in any hands other than those of a banker they will detain the person for examination."

It is evident, of course, to us, that young Warrington after receiving the telegram from Mr. Harwood had comprehended the situation at a glance. Some person of whom it was hoped that he might be the long-lost father of his friend was in Madrid, Spain, under the protection of the United States Minister. Albert's friends in America, to whom the information had come, desired to get at the truth of this remarkable supposition, and before any intimation of it should reach the ears of either Albert or his sister Tama. Warrington himself, therefore, must get quietly away from Amsterdam and hasten to Madrid, Albert being kept ignorant of the mission. Just how the information should have reached Williston, or why the person who was thought to be Albert's father should be detained at Madrid, were questions young Warrington took no time to consider. He accepted them as mysteries to be solved by his obedience to directions. He readily understood that should the report be untrue the shock would prove a severe blow to Albert and Tama, possibly unfit Albert for completing his important mission abroad, and that therefore it was wise to keep him in ignorance of the new hope. Warrington knew that Albert had always cherished the possibility that his parents might yet be found alive, and that several attempts had been made to dis-

cover the fate of the passengers on the ill-fated steamship; and even since they had been in Amsterdam William had heard his friend declare the intention, now that he had accumulated sufficient means, to make a personal exploration of the African coast in the hope that some traces of the lost ones might be discovered. Although it had long been generally believed that there could exist no hope of finding alive any of the passengers or crew, Albert had clung to the theory that until more definite information than any that had reached him, there was reason to live in the faith that his parents were alive and would some day be returned to the hearts and affections of their children. Warrington also reasoned that he should have with him for emergencies, a good sum of ready money, and thus it was that he boldly carried away the deposit certificate for two thousand florins, with the knowledge that the act might leave him liable to a most unfavorable suspicion.

But this bold act did not in the least shake Albert's confidence in him. "I am positive," said Albert to the detective, "that William Warrington has committed no crime, and if ever he is found alive this mystery will be fully explained. I am painfully anxious about his safety, but as to the question of his honor my confidence is as firm as a rock."

"It is *not* because I fear fraud that I employ your services," he went on. "But until I know the particulars of his departure, or hear that he is somewhere alive and well I shall not be able to rest. I demand that no pains, no expense be spared. But I wish to impress upon you, however, that in case he is found alive I do not want him interfered with. He is not to be apprised that any inquiry has been made, that any uneasiness has been felt. It is only a knowledge of his whereabouts I seek. Nothing you are able to surmise can disturb the abiding faith I have in the integrity of William Warrington."

At the very hour of this interview between Albert and the Amsterdam detective William Warrington was in Madrid and on his way to the residence of the American Minister.

Arriving at the villa the young American was soon in conversation with that gentleman.

"I am, indeed, glad to see you, Mr. Warrington," said the Minister. "A dispatch from America informed me you would be here and I understand the object of your visit. You have just arrived from Amsterdam, I believe?"

"Yes, I was delayed on my journey nearly a day by a railroad accident in France, or I should have been here yesterday. You must excuse me, but I am so exceedingly anxious to know the facts about the object of my visit that I must beg you to make me an explanation at once. The only information I have is contained in these two dispatches which you may read," and he handed the Minister two small sheets of paper.

"You shall know everything as quickly as possible, and we will go to see the people in question. The facts which were not expressed in my dispatches to America are these: There are two gentlemen and a lady here who represent themselves to be a Mr. and Mrs. Vangrift and a Mr. Colgert. It is claimed by them that Mr. and Mrs. Vangrift were among the passengers and crew of a steamship some years ago which went ashore in a hard gale on the coast of Guinea, and that they were washed ashore, and perforce gave themselves up to the natives and were taken under the protection of one of the prominent rulers of Dahomey and by him sent to his royal residence in the interior. They were held captives though they were treated with great respect. A few months ago, as they represent, this Mr. Colgert being in the north of Africa, heard, in some way, a tale about some white people being held captives by a powerful band of native Africans somewhere in the interior, and he determined to learn the truth. Tracing up the report he found that it came from a sailor who had himself been held by a neighboring tribe but who had managed to escape. After a long conference with this sailor, as they state, this Mr. Colgert started away to try and find these white people, announcing that if he should learn their existence to be a fact he would rescue them or sacrifice his life in the attempt. I shall not wait to tell you all the particulars for you will soon hear them minutely and accurately. To hasten on: This Mr. Colgert went to Sierra Leone where with a native guide he made his way to the Dahomey coast. On the Dahomey coast he learned that the strange tale was true — there really were some white people detained somewhere far in the interior. A native runner was hired to take a message on and to find a means of conveying it to the captives.

"After a long period of time the messenger returned; and he brought a short note written by this Mr. Vangrift, saying he and his wife were alive and imploring that they might be liberated, and suggesting also that the royal governor might give them up if a good sum of money or its equivalent in trinkets and notions could be offered him. Mr. Colgert says he was unable to make any such offer as he had only money enough to pay his guide in case it became necessary to visit the royal home and where he intended to go, if possible, should he fail in securing the release of the captives without. After many fruitless efforts at inducing some one to furnish the money that he thought might be acceptable to the negro king he at last succeeded in making the acquaintance of a trader and of the master of a merchant-ship who together entered into an arrangement by which a reward should be offered for the release of these two captives. The agreement also provided that the captain should bring them and Mr. Colgert to some port where arrangements could be made for the repayment of the reward offered the African chief, also payment for services and for passage of the three persons from Guinea to Spain, or wherever; the sum amounting, it seems, to about two thousand pounds sterling. The captain came only as far as Tangier with his vessel, and from there sent Mr. Colgert, in company with a gentleman who acted as agent for the captain, on to Madrid to see if the money could be procured soon and also if I as the representative of the United States would take charge of the captives, and in case the money must come first from America if I would give a bond for the custody of the persons until the money could be procured."

[Bonds are given for a great variety of purposes. They are written promises either to do, or to have done, certain things. Sometimes they are for the payment of money in case the person for whom the bond is given fails to pay, or should he commit some act by which he is liable for the payment of money. The person who becomes responsible for another by giving a bond is known in law as a "surety" or "guarantor," and documents of this character are often termed "contracts of guaranty and suretyship." The term "bond" has such a wide range of application that this particular form is more properly classed in the list of contracts between persons. The term "bond" is often used to designate a class of securities issued for the payment of money at a specified time, and drawing interest, as government bonds, railroad or mortgage bonds. But the document referred to by the consul was in the nature of an agreement or personal contract. The law relating to contracts of suretyship is indeed voluminous and a knowledge of it is of much importance to all persons engaged in commercial affairs. In the case of the American Minister, the bond required by the captain was one in which the American should agree that the persons, if left under his care, would not leave the city until the money due the captain should be paid, and it must have provided, as a consequence, that in case they did leave the city before such payment the U. S. official would himself become personally liable for the payment of the money.]

"I agreed to become jointly responsible for the debt. Mr. and Mrs. Vangrift were then brought to me and I told them that if they desired I would aid them in getting to America, whence, among friends, they could send the money due the captain of the vessel. This offer they declined, assuring me that they would not leave Madrid until their friends could be heard from and the money raised. I had them taken care of at a hotel in the city where they are now stopping, and Mr. Colgert instituted inquiries in America which led to the knowledge of the Vangrift young people in Williston, and to the fact that their parents had been lost at sea, and that the Williston people would send a representative to Madrid, empowered to act, and assure me of the identity of the rescued people."

"Let us go at once then," said William, pale with intense anxiety. "I would like to see these people as soon as possible. A few questions on my part will settle all."

"Yes, of course it is possible these may not be the Vangrifts whom you seek," said the Minister.

They were soon on the way to the hotel.

During the ride, Warrington hastily reviewed the account. From some of the circumstances related, he felt assured of the great joy his visit here was to carry to many hearts near and dear to his own. How many times had such a glad possibility been discussed by himself and the beautiful Tama during their walks and drives in Massachusetts!

How he longed to send his news—his hopes to

the little party in Scotland, and to Albert in Amsterdam!

Here the carriage halted abruptly in front of a queer-looking old Spanish hotel in the central part of the city. Entering, the Minister advanced to the clerk's desk, spoke a few words in Spanish and was about to pass along into the reception room when a word from the clerk stopped him. Then followed a brief conversation which, though William did not fully understand, was sufficient to inform him that the circumstances related by the clerk were quite surprising to his friend.

"They have taken a carriage," said he to Warrington, not a little excited, "and gone to my residence. From what the young man says, I think they have been sent out by some sudden news. They probably drove out by some other street or we should have met them."

But even as he spoke, his fears were dispelled. A carriage passed in front and drove around to the side entrance. "Ah! here they are," said he, touching William on the shoulder and directing with a glance to the door which was just being opened. "Be seated here in the lobby until I can speak to them and announce your arrival." Thus excusing himself the consul hastened to the door, and with two gentlemen and a lady passed into a reception room.

"First I will hear what you have to say," said the Minister, "for I presume you to have something to communicate."

"Yes," replied Mr. Colgert; "we were surprised this noon by a call from Mr. Lomero, a banker, who informed us that he had received a dispatch from the London firm he represents here inquiring about Mr. and Mrs. Vangrift and informing him that if they were the Americans by that name who were supposed to have been lost by the wrecking of the steamship Encounter to render them any assistance to the amount of ten thousand pounds, drawing for the amount on Brown Brothers, Boston, Massachusetts, through his London home office, the original order coming from Williston people. Mr. Lomero says he only wants to know that these people *are* the ones referred to in this dispatch and they may have whatever they need to the limit specified. We thought it advisable to consult with you, as to how we could best establish the identity of Mr. and Mrs. Vangrift. They are as you know growing intensely anxious to get where they can learn particulars of their children and to hasten where they can see them if they are still alive."

"No doubt. *I* also have some important news for *you*. I have just driven from my residence with a young man who is I presume the one referred to in the dispatch I received from Mr. Harwood, of Williston, Massachusetts. He is extremely anxious to see you!"

Mr. and Mrs. Vangrift both rose to their feet in great excitement. There is no doubt that they both thought the gentleman about to enter might possibly be their own son, for after a piercing gaze the lady sank down in her chair with a sad shake of the head and a sigh. On his part, young Warington, with as piercing a gaze, slowly shook his head. On those worn, anxious, embrowned, elderly faces he saw no resemblance to the handsome Albert, the beautiful, spirited Tama. His heart sank. His hands trembled as he took theirs. The question which was to be the test came in husky tones from his lips. "Your children, those you left in America — what were their names?" asked he.

Great tears rolled down the man's face; he could not speak, though he opened his lips. But the answer broke in a cry from the mother: "Albert — Tama — Mitty — Tossa! Do you know them? Are they living? Have you seen them? Do you know them?"

Warrington's face was radiant. He lifted his hand, a signal of joy, to the Minister and to Mr. Colgert. Then he turned back to the mother whose hand he held: "*Do I know them*, dear lady? Albert Vangrift is my best friend, Tama Vangrift is my promised wife!"

Ah, that was a joyful hour! To the rescued captives, young Warrington stood instead of home and children. To Warrington it was given to express the tender love and gladness of Albert and his sisters.

"My son is a good man?" faltered the father as they talked. "He was a little boy when we sailed for America. But he was a good boy."

"Surely," said the American Minister, with a smile, "you have had a ten-thousand-pounds testimonial as to his character to-day from his fellow citizens of Williston."

(THE END.)

ONE OF THE PLEASANT AUTHORS: ANNIE KEARY.

By Amanda B. Harris.

NOT for many a day have I read any sweeter stories than *Janet's Home*, *Clemency Franklyn*, *Oldbury*, *Castle Daly* and *A Doubting Heart;* and no account of the childhood of an author has ever pleased me more than that of the lady who wrote them, Annie Keary, as told in the "memoir" by her sister Eliza. And in thinking them over (just as it was while reading them), the greatest charm to me is in the pictures of the lives of young girls. They are so natural that I seem to have known them all the way up, just as if they had been bright girl-neighbors of mine who spent pleasant days with me, or made door-yard calls of a summer evening, or stopped to chat over the gate, as they do in her books.

Each book has several, and they are so true and so delightful! Such girls as her Ellen Daly, her Emmie West, her Clemency and Janet, Rose Ingram (in the younger story of *A York and a Lancaster Rose*), her Cecil and Elsie, are rarely found in novels.

For, yes; these are novels. But there comes a time in your young girl-life when you will read novels; and fortunate will you be if you find such wholesome ones as these, so exceptionally pure, and in which you can have such a quiet kind of enjoyment while all the time you are being helped to live a worthy and womanly life. The truest womanhood, such as Ruskin holds up to you, is in them, all through them; and that girl must have had her taste badly perverted by vicious books who cannot take pleasure in these.

It is not every writer who puts his or her own personality into a book, but you feel at once that this one has; and on reading the "memoir" it is clear that the daintiness and delicacy and nobility of character are in these young heroines because Annie Keary was herself a beautiful character; and that the refinement is that of her own true ladyhood, the unselfishness such as was the controlling influence of her own life. But you see a great deal more — how it was that she knew so much about young people, could enter so into their feelings, understand their faults, their ambitions, their trials and perplexities; why there was such comradeship of brothers and sisters; how she came to know that Connor and Ellen could have that adventure about the dog, and the unfortunate brothers could get into so much trouble, how the patient sisters could be such helpers, how they played queer games, and imagined things, and acted out from day to day such genuine boy and girl life.

Annie Keary was herself one of a house full of children, there being five older and two or three younger. She was born in Bilton (Yorkshire, England), in the rectory there (her father being the clergyman in that parish), March 3d, 1825, when snow-drops and violets were making the garden glad, but soon after the family moved to Hull, and a part of the time they were at Nunnington up at the foot of the moors in that same Yorkshire, so dear to us for the sake of the Brontë sisters, just as Clovelly in Cornwall is for Charles Kingsley's sake.

Her mother was a Yorkshire girl, and used to tell her children stories about her early home; Eliza says of that story-telling:

> "Then there were the sisters whose lives she made us realize by her charming description of their old-fashioned childhood, with its country luxuries and amusements, the trim flower gardens, the perfume distilleries, the toy spinning-wheels. But better still were the stories that took us to a generation yet farther away, whose scene was laid in a tumble-down old place called Lilling Hall, where our mother's grandmother had lived, with the old maiden aunt of the family, always known by the name of "Little Aunt Anne." Those were almost fairy tales our mother told us of the ideal days which she and her sisters had been wont to pass there in delicious idleness, when the heaviest burden of the summer hours consisted in the picking of rose leaves and lavender for the *pot-pourri* that little Aunt Anne was so marvellously skilled in making. I have some of the very stuff by me now, in its old purple jar, the last relic of Lilling Hall, and it is still sweet with the scent of a hundred years ago."

You will come across the fragrant purple jar in more than one of Annie Keary's books; you will find gardens "full of broad white lilies, and full-

blown cabbage-roses and lavender," and you will see just such an old hall, with its great, windy passages with doors covered with green baize, its chimney-pieces of carved oak, and heavy, antique furniture. When you read her exquisite descriptions of places, houses, scenery, you may know they are real. The Morfa Mawr in *Janet's Home* is the very region in Wales where she once made a visit; the valley among vineyards and olive groves in *A Doubting Heart* is Pégomas in the South of France where she spent some delightful seasons among just such peasants; and *Castle Daly* vividly portrays the wild Irish landscape as well as the Irish character about her father's early home.



ANNIE KEARY.

Annie's father was Irish, and those two, Eliza says, "represented the Irish side of the family;" warm-hearted, gifted, imaginative, who "loved their books so tenderly, who thought and dreamed, who lived and met in an ideal upper region, exchanging sweet smiles and confidences there over the drudging world below." As a little child she was his pet and in the most intimate sense his comrade; you will notice in several of her stories the beautiful devotion of a dear daughter to her father; it is one of the sweetest things in Ellen and Janet and Rose. Mr. Keary was broken in health, too, as some of the fictitious fathers are (no, not fictitious in one sense). The two, so loving and sympathetic, used to have famous secrets between themselves, and the little maiden sitting on her father's knee, wrapped in his arms, would listen, all absorbed and absorbing, while he told her about his adventures in his young manhood when he was a soldier in the Peninsular War, till she imagined she had been there with him, and he would say:

"'Twas you and I held fast side by side through that stiff march across the common in the heat; we two stormed Badajos together, child."

And she would dream:

"Yes, yes, it was papa and Annie who fought under Wellington together, and now they sit by the fire in cosey winter evenings, the two old comrades, and live the campaign over again."

Then he would rehearse to her the events of his childhood in Ireland, and she would picture it all out, just as long, long after she did in *Castle Daly*, where she has Ellen say:

"And I know two or three things, besides how to build up peat-fires, that you will never know of if you live to be a hundred, and study all the books in the world. One is, exactly how it feels to run about barefoot on a turfy mountain side on a spring morning early, and how delicious potatoes dipped in egg-noggin taste when you come in afterwards and sit on the cabin step, with the sweet peat-smoke curling around you — a sensible Connaught pig munching the parings at your side, and a brood of downy little goslings stumbling over your feet. You would not think the peasants such savages for living in the way they do, if you happen to know how pleasant all that is."

She makes Irish scenery delightful, and some homes so bewitching that if one were to go to County Galway one would be tempted to inquire for "Good People's Hollow," and for "Happy-go-lucky Lodge," where Cousin Annie lived, gave good counsel, comforted unlucky young kinsfolk, managed the wild Irish and dispensed hospitality.

Born into a houseful of children, I have already said; and they were as interesting as the young Brontës, without any of the gloom and privations of the Brontës. Their characters and their doings are in her books, under other names and a thin disguising. Annie was a loving little sister, who was always saying "we," "we two," and "all of us together," taking in all the brotherly and sisterly life; no selfishness of "I" or "mine" —

the warm, fond heart wanted them all. She makes the tiny Ernestine when she could just speak plain say to her sister, "Janet, you and I are two 'each others,'" which is so like — how like it is, that "two each others"! — to Mrs. Whitney, just what any of her Faith Gartneys or "We Girls" might say!

They were most real, those young Kearys, creatures

> "not too bright or good
> For human nature's daily food."

But what imaginations they had! Was there ever anything more purely mythical and more delectable than their inventions up in their play-room, where Annie with her inspired face and eyes bright as stars, "dilating with lights and depths of mystery and fun," set them going? There was a good deal of harmless mischief done by them at one time and another; they even dared at the missionary meetings in their father's drawing-room to go and dress themselves up in the ministers' hats and coats left in the hall, and personate the owners, reproducing the tone and manners of each one. With all Annie Keary's gentleness and sweet piety, she had the sense not to make her story-children priggish and old. They are very human; the young Ingrams (in *A York and a Lancaster Rose*) have a passion for natural history, which spends itself in a few weeks, and the crisis comes when the hedge-hog that had been living in the doll's cradle in the play-room unbeknown to the Ingram parents, is drawn out of the plate-basket instead of a gravy spoon by the butler during a dinner-party; a blind worm "who had been expected to drink milk and develop into a wonder of intelligence and devotion" pokes its head out from the waistcoat of one of the boys, and a fish is found in the sugar-basin by the governess, who is laid up with a nervous headache in consequence. There is a rogue-boy Charley who keeps his little sister nervous by "inking the legs of a 'father-long-legs,' preparatory to turning it loose for a promenade" over the manuscript of their absent-minded father, the Professor, or "balancing his inkstand on a suspension bridge formed by a paper-knife and two infirm dictionaries."

Annie and her brothers and sisters have a "Magic Land;" the house "is a story house," and imaginary people are as real to them for the time being as themselves; and it was "Annie who sowed the dream-seeds." When she was a little older, she would make raids on the library and fill her pockets with volumes of Plutarch and Rollins and carry up to the low, square play-room, and there in the winter twilight they would make believe that Socrates came and talked with Pericles and Plato and became acquainted with Themistocles; and in that room, those noble ancients conversed, with the enraptured children for listeners, and these Annie called the "P. D." evenings — "pleasant discourse." While they were living in Hull, she and a favorite brother set about making studies of the people together. Miss Berry in *Oldbury* is one of them, being an actual person with those gentle, odd ways, a quaint, good little body.

The children and the youths and maidens of her books are delightful to know because they seem actual flesh and blood, and are so bright and wide awake. They have names for one another and their acquaintances, like "Elderberry" and "Griffiness" and "Flower Aspect" in the Oldbury story; and could there be anything more delicious than the way Christabel in *A Doubting Heart* spent the money in "Fortunatus's Purse?" It is very enjoyable, too, the vast happiness the young Ingrams had in playing "Desert Island" on the garret stairs. Whatever befalls, they all can get a great deal out of life, take care of themselves and make the best of everything; even Emmie West in her cheerless home can run up to the second-story lodger's room and be in the "Land of Beulah," or higher up where Katherine and Christabel are, to "Air Throne," or gather her tribe of restless brothers and sisters, "Casabianca," the "Gentle Lamb" and the others into the disused butler's pantry, which they called the "Temple of Youth," where their naturally high spirits "managed to bubble up above the dull crust of care which extinguished them outside the sanctuary," listening to which merriment so encouraged Mary Ann, the servant, that she was enabled to go on with a braver heart in her cogitations "as to how to dish up two mutton cutlets to look as if they were five."

The atmosphere of youth, its immortal freshness, is about her books. In some sense one feels braver and cheerier for reading them, notwithstanding some gloomy persons who come in

and some saddening events, just as in life. Her young girls had their originals among her own school and other friends; the Rosamond of *Janet's Home* whom you might think unnatural was a certain Marion of her school group. Cecil, Mildred, Janet — the memoir hints at a key to these. She understood girl-nature, but she always saw the best there is in it and what it might develop, and she made her girls come up to their ideals. Janet is faulty, often discouraged, often saying things she was sorry for, failing in the plainest duties but keeping a high standard of what she ought to be, and steadily striving to overcome, till unconsciously to herself she becomes an admirable character, so that impulsive Rosamond says to her long after, to Janet's utter amazement:

> "Do you know it was hearing stories about your home life, that gave me the first definite idea of duty I ever had? I admired what I heard of you so much that I set it before myself as an aim to become more like you, and so began to practice a little self-control."

This it is — *home* life; the little events of every day in the family which seem to mean nothing at the time but are silently exerting an influence: the way one bears small trials, and rises above annoyances, and is able to correct faults. They are the minor kinds of heroism that she makes so noble. It is not to show how Clemency and Emmie appear in society, or how they dress, but the steady growth of character, and what they really are in their relations to those they live with, which is of infinitely more consequence than the most brilliant career that was ever lived if noble traits are wanting.

Clemency is a type of perfect candor, an exquisitely transparent nature which has an influence on everybody, so that all shams, affectations, attempts to deceive, or alter the truth, are rebuked by her presence. Not often does one see integrity, uprightness in word and deed set in such a strong, white light; it is in that book, too, where we make the acquaintance of Miss Arnays, who is the author's finest portraiture of a genuine lady.

Does this look as if there were preachments and moralizing? Not at all. You would never suspect a lesson. The stories are charming; there is not a skipable passage in them; you seem to be just where the events are taking place, and live with the people, but the little golden thread of help to a nobler living runs right along at the same time, and before you are at the end you are conscious of it.

You will like to know how fully Annie Keary believed in the power of this gentle influence; she wrote to a friend about Ellen and Anne of "Good People's Hollow" that she meant them to be "the sympathetic people, who *alter* those they live near not by subduing, but by permeating them with influence; and I want to show how much more really powerful that way is, though the people who use it often look weak to observers who don't see far enough."

And (happy principle for a writer to be governed by) she believed in having her stories end well, and writes to a young author:

"No, I do not want you to make your story end miserably, you had better not; but you must not fix it to one life. The use and the charm of writing is that it helps one to help others to get *outside* one's own experience."

To this same friend who was teaching poor girls, she says:

"I do not think anything is more really satisfactory than the sort of work a person like you can do among girls of a different class — drawing out the real refinement and womanliness, that is so often kept down by circumstances in rougher life. There is so much more in every one than they know how to bring out. . . . Such a happy chance came to us once in a pupil we had in a night-school in London. . . . It was *so* pleasant to read the delight in her face when a new thought came to her, or when she began to take in some description or comparison in the poetry that had been dark to her at first from her having lived all her life among the sort of things which gave her no recollections to compare it with."

You will like to know that she usually had great happiness in writing her tales; her sister says:

"The nucleus of these was always some little cluster of persons whom she suddenly seemed to find in her mind. . . . She used to say that her heroes and heroines were quite alive and real, and that they spoke and acted of themselves, independently of her control . . . she used to settle herself to work in the midst of all sorts of

difficulties, at the mother's bedside often, writing there during intervals of talk; or she would take her MS. before her at the common table, where every one else was reading or working, or even talking, as the case might be."

Her own life was one of helpfulness to others; for years she took care of her brother's children for whom some of her fairy stories were written, then of those of a friend absent in India; she was the stay and comfort of her father in his ill health, and later for nearly ten years the constant nurse of her invalid mother, and when this last parent was gone, she did kind deeds for charity's sake in London (you will see in *A York and a Lancaster Rose*), and died on March 3 (her birthday), 1879; feebly writing with a pencil the last few pages of *A Doubting Heart* only a fortnight before her death.

Her sister Eliza was likewise a story-teller, and her fairy-book is one of the most captivating that ever was written, about the fairies of the south of France. Every chapter is a delight, especially that where the Fée supper is spread and the two bad neighbors bring the sack of cats, unfasten the string and pour them upon the table — "seven famishing cats upon the very supper table of the expected guests."

NOTE. — Annie Keary wrote *Janet's Home*, *Clemency Franklyn*, *Oldbury*, *Castle Daly*, *Early Egyptian History*, *A York and a Lancaster Rose*, *The Nations Around* (a fascinating sketch of the empires around Palestine, full of graphic description and Jewish legends); the two sisters wrote the fairy book *Little Wonderlyn*, and *The Heroes of Asgard* (stories of the Scandinavian mythology — the very meat and marrow, as only a born story-writer could do it). Eliza wrote *The Magic Valley*, and the *Memoir* of Annie. A little library of choice books.

WONDER-WINGS, MULLINGONGS, COLOSSI, AND OTHERS.

BY C. F. HOLDER.

XII.

GIANTS.



LONG ago and in fact in almost every period of human history we find references to giants, supposed human beings of enormous size; and so complete and serious are the discussions and measurements in many of the old histories and scientific works that there can be no doubt as to the good faith of the writers. In the tenth, eleventh, and twelfth centuries some of the most important controversies among the wise men were in relation to these "finds" or discoveries, which, it is needless to say, were not what they were supposed to be — though certainly giants.

About the middle of the eleventh century the scientific world of Europe was thrown into great excitement by the report that the body of Pallas, the son of Evander, had been discovered under the tomb of the Emperor Henry III. The bones were of immense size, and the finders conjectured that if placed together the figure would stand as high as the walls of Rome. This story was received by the incredulous; but later the remains were shown to be those of a fossil elephant — a giant indeed, but not a human one.

In the fifteenth century numbers of fossil elephants were discovered, which, with hardly an exception, were considered giants; and one excavated in Dauphiné, during the reign of Louis XIII., caused more controversy than any subject, political or scientific, of the time. All classes of scientific men were arrayed against each other; the two parties being divided as to whether the bones were those of an elephant or the giant Teutobochus.

Later in 1577, the inhabitants of Lucerne, Swit-

zerland, announced to the world that a giant had been discovered in their precincts. The announcement was made by a distinguished man of science, Professor Felix Pläter of Bāsle, who examined the remains by order of the council, and reported as above; and forthwith the eminent professor was requested to make a design of the giant restored, which he did, giving the figure of a man about twenty feet in height, and this the proud populace adopted to support the arms of their city. The design and some of the bones can still be seen in the college of Jesuits at Lucerne. But when Bhumenbach examined the bones he immediately pronounced them those of an elephant, much to the mortification of some, while others held out for the giant.

Even in America when the first mastodon and fossil elephant bones were unearthed they were thought to be those of giants; but a race of human giants never existed, the so-called ones being only exceptionally tall men of seven feet and some inches.

The ancient days of the world's history were preëminently the days of giants; life in what is known as the cretaceous, or chalk age, attaining a remarkable development. Some of the animals were so large that it is difficult to see how they moved about with agility sufficient to preserve them from foes, and if man existed at this time, he was confronted with many creatures compared to which the largest land animals of to-day are mere pigmies.

Several years ago some laborers were engaged at a work which required excavations, in the Sewalik Hills of India, when they came upon the remains of an animal of remarkable size and structure. By carefully removing the soil they exposed what might have been used as a hut for a dozen or twenty men, and it proved to be the shell of an enormous extinct land-turtle. It was taken out with great care, and after a while carried to England, where a perfect restoration may now be seen in the British Museum. Its dimensions were as follows: length ten feet, horizontal circumference twenty-five feet, and girth in a vertical direction fifteen feet.

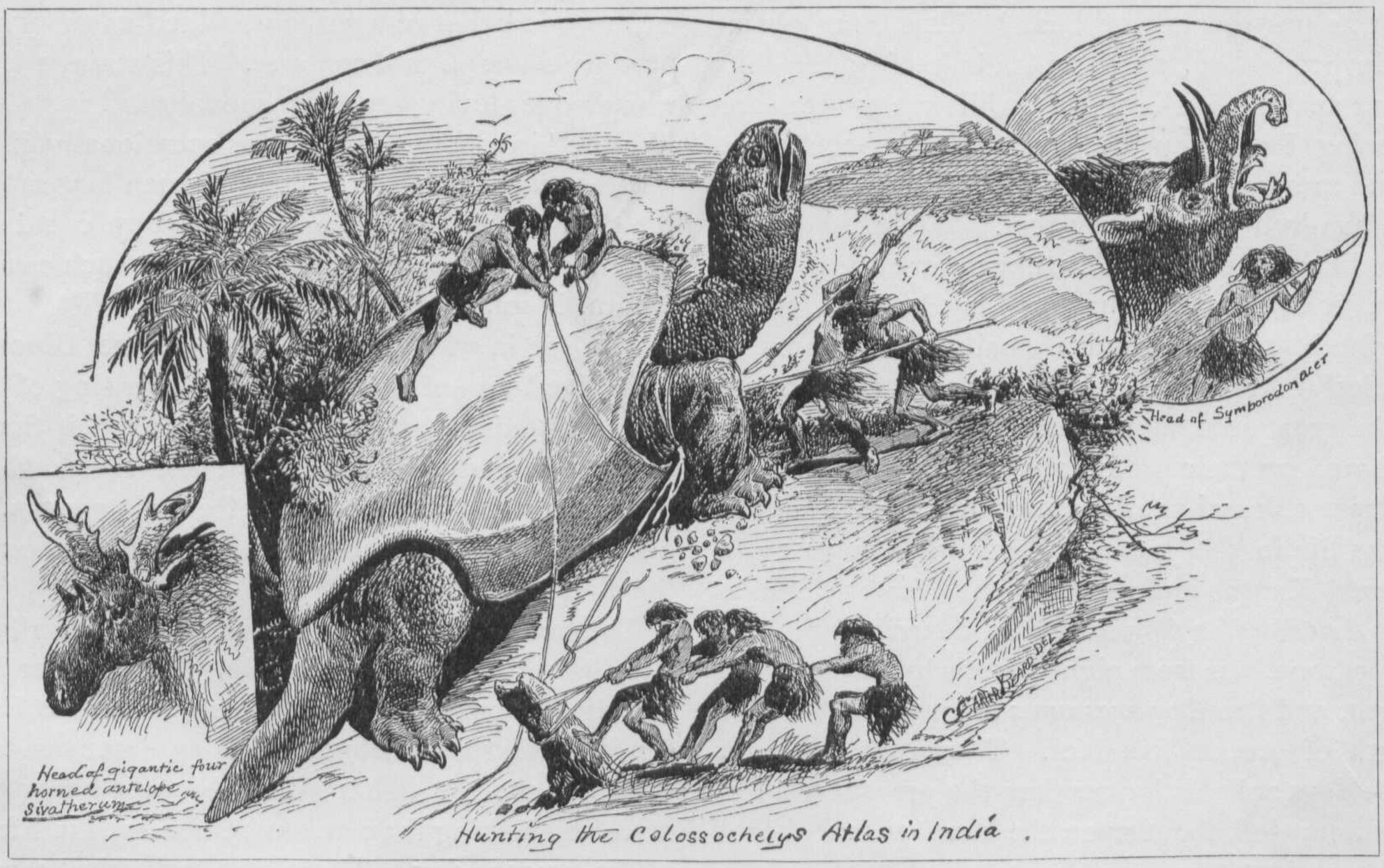
But this was a young turtle, a baby, so to speak, gigantic as it was, and one third less than a larger specimen, which we may picture as a monster crawling slowly over the ground; its enormous dome-like back, when raised on the stupendous legs, eight or nine feet from the surface, its footprints in the soil as large as those of a rhinocerous; some authorities give its total length, when restored, as twenty feet.

Such a huge slow creature must have been comparatively helpless, and have fallen a sure prey to the primeval hunter who, though armed but with stone axes and rude weapons, could destroy it and use the shell as a house for his family. The scene of such a capture may well have been an exciting one; even though the monster was comparatively harmless its great strength must have enabled it to make considerable resistance in attempting to escape. Fancy a score of men mounted upon its dome-like shell; and vines, or ropes perhaps, used to retard the creature's movements, and thus harrassed, belabored by the heavy stone hammers about the head, pounded by the agile men upon its back, the great beast pushing sturdily on, crushing small trees and bushes in its way, sweeping off its enemies, while others follow with loud shouts, until finally completely entangled, it draws in its powerful legs and falls to the ground, awaiting its fate after the manner of the giant Galapagos turtle of to-day. With the rude appliances of such an early time the *Colossochelys Atlas*, as it is called, even now would seem comparatively safe with its feet and head drawn partly into its shell; but the lowest native tribes of to-day almost invariably devise some method for slaying the larger animals, and those early hunters, if there were men at that time, would probably have been no exception.

A party of workmen, some years since, were blasting in a quarry at Rock Hill, near Maidstone, England. The material was limestone, and among the pieces that came off after a blast, the overseer noticed a section which resembled petrified wood. Having an unusual appearance it was taken to a scientific man, who pronounced it a part of the skeleton of some gigantic animal. The laborers were directed to remove the specimen with great care, and the result was the collection of the remains of one of the most remarkable creatures of ancient times. It was the Iguanodon, a giant representative of the little lizard iguana now found in the South American country, a harmless creature rarely exceeding two or three feet in length. Its extinct relative was quite another affair. In bulk

it would have equalled three animals as large, perhaps, as the lamented Jumbo. It stood like a kangaroo upon its colossal hind legs, and rested upon a tail of massive proportions. When standing thus, and gnawing from the trees of its choice, its head must have been fourteen or fifteen feet from the ground, and the total length from head to tail nearly thirty feet. Imagine such an animal in England to-day! for in former years it wandered about what are now the streets of London, grazing upon and tearing down the large trees of the time, and grinding them with its curious teeth which had ser-

the vivid imaginations of the writers of old have pictured, fail to compare with the actual reality. In fact, if it were desired to-day to produce a book of wonders and marvels, describing the dragons and other terrifying creatures, it would be only necessary for the historian to refer to the geological discoveries of the last thirty years, and represent the animals just as they were. What was the dragon of St. George to certain huge bat-forms or the unicorn to the loxolophodon with its many horns? The roc of the Arabian Nights was not more wonderful than some of the fossil birds, and



SOME OF THE GIANTS.

rated edges like those of a shark. Like the huge turtles this giant was a slow mover, and would have been easy prey for mesozoic hunters with javelins and arrows.

Almost equally large and much more ferocious was the megalosaurus, which, instead of being a plant eater was carniverous, and preyed upon other animals, and must have been a fierce and formidable foe.

While Europe has produced some remarkable giants, America leads in this respect, and in the early days was peopled by races so astonishing, that all the dragons and fanciful monsters which

even the great cuttles, the Poulpes of the grave Bishop Poutoppidan, seem almost equalled by the giant squids of to-day, some of which are fifty and sixty feet in length. In short, the imagination of man cannot picture wonders to compare with the actual creatures which have lived upon the globe.

In the geological hall of the Museum of Natural History, Central Park, there is upon one of the shelves an object about five feet and a half in length, extremely bulky, and weighing so many pounds that two men find it all they desire to carry. It is of a brown hue, and might be taken

for the trunk of a fossil tree or part of a huge branch. At its side lies a small white bone four or five inches long, with a label to the effect that it is the corresponding bone of a living crocodile. In fact, the great brown mass, as bulky as a large man stretched at full length, is the thigh or hip bone of an American giant, which in former years roamed the great cretaceous sea of the West. The largest crocodile of to-day is about twenty feet in length, and its thigh bone four or five inches. If the thigh bone of the Atlantosaurus, of which this is a part, be six feet long — and Professor Marsh has discovered one eight feet in length — how long must its possessor have been? This is an example in proportion, which will admit of widely different answers perhaps; but while my readers are guessing I will say that geologists believe these giants to have attained a length of from eighty to one hundred and twenty feet. While they have been likened to crocodiles they differ entirely from them in appearance, having long legs, an attenuated tail and neck, and a small head; giants of wonderful structure, living in the shallow waters of the great seas of the time, floating perhaps, or anchored by their prodigious feet and tail.

These colossal saurians were a common feature of the life in the Jurassic days, when a vast sea covered Kansas and most of the Western States. The *Amphicoelias fragillis simus*, described by Professor Cope, was from eighty to one hundred feet in length, and the *Camarasaunes supremus* attained a length of seventy-five feet. Thus there were in those days animals longer than the present whales, which crawled about upon the beaches and shores of the ancient seas.

If man existed at the time — and we have no evidence that he did, except that the climatic and other conditions would have permitted it — he found wondrous game indeed; and to have followed these mighty creatures in rude crafts and attack them with crude weapons, would have been a daring feat. An animal which was equally at home on land and sea; which could sweep a large area with its enormous tail, dive into the greater depths with great velocity, and while its body was far below watch its prey, extending its neck upward, was certainly game worthy the name.

These huge monsters were undoubtedly harmless if undisturbed, their only method of defence being the tail, which, like that of the crocodile, could probably be hurled about with great force, crushing a smaller animal with ease.

The fact that many of these giants were practically defenceless is somewhat remarkable, and this is particularly noticeable in one of the Dinosaurian reptiles of the mesozoic era, described by Professor Marsh, of Yale. Its dimensions were colossal, and its weight many tons; yet its head was astonishingly small.

The *Brontosaurus excelsio*, as it is called by its discoverer, possessed a body of elephantine proportions, to which was attached the long attenuated tail of a crocodile, while the head and neck call to mind that of a serpent, added as though to produce an unnatural contrast. This strange giant was a water-loving reptile; probably drifting about like the hippopotamus, perhaps occasionally lifting itself on its hind legs which were much larger than the others; but how so huge a creature could sufficiently supply itself with food having such a small mouth, is somewhat of a mystery.

The sea in which some of these huge Dinosaurians lived was of vast extent. The rising of the crust caused it to become shallow, and it finally resulted in mud-flats, entombing the giants whose bones now rest under fields of growing grain, or are exposed by the winds that weather them out in the Bad Lands.

The mammals, or milk-giving animals, of a later time were no less remarkable. In the Tertiary period the space from the Missouri River to Eastern Wyoming and Colorado was an extensive lake or lakes, and the sights to be seen must have been more astonishing than any to be observed in Africa at the present day. There were primitive camels (*Poëbrotherium*), strange hog-like animals, the Oreodon, and another remarkable form, the Elotherium. But strangest of all were those colossal beasts as large as our Indian elephants, but with shorter limbs like the rhinoceros, having four toes in front and three behind. In one, the Symborodon, the head was very long, and armed with two long sharp stout bony protuberances.

Preying upon these animals and others were American hyenas, with dog-like characteristics and a terrible array of teeth; dogs, cats, tigers, and panthers of more or less ferocious aspect; remains of which are found in vast numbers on the borders and in the bed of these ancient lakes, known now as the White River formation.

About this time in the region of the Himalaya Mountains, a wonderful giant was roaming about; a creature as large as an elephant, covered with thick shaggy hair, which upon the neck, above and beneath, formed a heavy mane. Its muzzle was large and wide; its feet hoofed, while from the head rose two pairs of horns; the front ones being straight and resembling those of the rhinoceros, though side by side, the rear pair were large; branching, and curved, giving the animal a ferocious appearance. This giant must have been formidable, and capable of defending itself from the largest beasts of prey. It was related to the antelopes and giraffes, and known to science to-day as the Siratherium.

When the famous phosphate beds were discovered in South Carolina some years ago, vast numbers of bones and teeth were unearthed, showing that in early times this locality had been peopled by a great concourse of strange forms. Among the most abundant curiosities, as the workmen termed them, were quantities of enormous teeth triangular in shape, and serrated on the cutting edge. When shown to a naturalist they were immediately recognized as shark-teeth, and it became evident that at one time the locality in the vicinity of Charleston was the bed of an ocean, and that gigantic sharks flourished there in great numbers. Whenever the beds of the Ashley and Cooper Rivers are dredged to-day numbers of these teeth are brought up, and one in my collection is nearly if not quite as large as my hand. As the bones of the shark are of cartilage, they have long since been destroyed, and only these beautifully polished teeth — for they are as fresh and glistening as when first discovered — are left to tell the story. It would appear to be an impossible task to restore this giant from a single tooth. But it is not so difficult as one might imagine. From the shape of the tooth of the great Carcharodon we can form some idea of its appearance by comparing it with existing sharks, and from its size we can determine how large it was. One day I attempted a rough restoration to gain some idea of the dimensions of the giant. I had in my possession the jaw of a shark which I had caught in the Gulf of Mexico, which would at the time pass readily over my shoulders. The shark was about thirteen feet long, and the teeth about an inch and two eighths wide, and an inch and a half in length. There were eight rows of these, each row being a little smaller than the last, until they dwindled down to mere points. I took as many of the fossil teeth as I had, and built up a jaw after the existing model, using teeth where I had them and leaving space where I had not. Gradually the great mouth grew on the floor until I found myself a small item in the area, and when completed I found that the largest fossil shark could have opened its mouth and allowed me to drive in a top-buggy, and that its length could not have been less in proportion than one hundred and twenty-five or thirty feet. The largest existing allied shark is the great Carchanas Rondetti, found in Australian waters, just one hundred feet less, there being a jaw of a specimen in the British Museum from one that measured thirty feet in length.

The Rhinodon, a huge creature, which feeds on small pelagic animals, attains to-day a length of sixty feet, and our common basking shark, I have been informed by reliable persons, attains a length of fifty feet.

Among the marine giants of to-day, the Japanese crab, *Macrocheiora*, deserves mention on account of being the most remarkable of living crustaceans as regards size. It is an ally of what in America we commonly call spider crabs; the forms whose diminutive bodies and attenuated limbs so mimic the rocks among which they hide. The Japanese crab resembles them except in size; the body appearing like a rock, so rough and irregular is its surface, and undoubtedly the animal is protected by this mimicry. In the Museum of Comparative Zoölogy in Cambridge, there is a fine perfect specimen though small, and not conveying an adequate idea of the largest specimens, one of which measured twenty-two feet from the tip of one claw to that of the other. They are comparatively common on the shores of Japan, and Professor Ward, who has collected them, informed me that they have a curious habit of leaving the water in the bays, and crawling upon the shores at night, presumably in search of food.

The largest fossil crustacean ever found did not present so formidable an appearance as the Japanese crab, though it possessed a larger body. It was a Pterogotus, a creature somewhat resembling a scorpion, and attained a length of nine feet.

While I have not intended to allude to the large living animals which might be called giants, I can-

not pass by a very interesting one which was first observed by Professor and Mrs. Agassiz off Nahant. It was one of the largest invertebrate animals ever seen — a gigantic jelly-fish, above five feet across the disk, with tentacles trailing after it one hundred and twelve feet in length. A much larger specimen is reported by Mr. Telfair, an English naturalist, as having been seen off Bombay. It was estimated that the tentacles were three hundred feet in length, and that the animal weighed several tons — a giant indeed when compared to the delicate forms with which the beaches of the New England coast are now dotted.

While the great four-horned antelope previously described was wandering on the plains of Asia, a remarkable elk was living in Ireland, probably as green and good a grazing ground as to-day. It was of commanding stature, being nearly ten feet in height from the top of its antlers to the ground. Nearly all the specimens found are taken from the bog, and discovered accidentally in digging out this material so valuable to the poor people. A fine specimen changed to a dark mahogany color from its long contact with the soil, may be seen in the Museum of Natural History, Central Park, and its horns are so large and spreading that a dozen people could perch upon them, and were the great elk alive little inconvenience it in point of weight.

The days of the giants seem to have passed away, the whales, the great basking shark, the elephants, and a few other forms, some doomed to extinction, alone remaining to excite our wonder at their colossal proportions.

WAYS TO DO THINGS.

By Susan H. Ludlum.

LVII.

OUR CONDENSED-HAND.

I MUST again insist on an improvement in your handwriting which grows worse and worse. Such illegibility is a discourtesy to your correspondents!"

Foolish girl that I was, I was greatly aggrieved by this rebuke from my kind father. If he only knew how many miles my poor pen travelled weekly, in its devious course over the paper while I took notes, wrote from dictation, made abstracts, translated German into English, and wrote compositions (*such* compositions, too), he would not wonder that the clear, if unformed, handwriting of a year since, had become a wretched "wiggle."

At the earliest opportunity I talked over my letter with Elinor; all my worries were talked over with Elinor.

"If he only knew how much hurried writing we have to do!" grumbled I. "There is no use in my trying for the Essay Prize if I can't scribble. You know how many rough copies I make before I am satisfied with my compositions! If I could only learn short-hand!"

"No use thinking of that, with all we have to do here," said the practical Elinor. "Don't you remember what a time David Copperfield had, learning to take down Traddles' speeches? Still, I don't see why we two shouldn't get up some few characters to stand for words most used; it would save *some* time, and be rather fun. I remember seeing a little book by a Mr. Ritchie, suggesting this, and giving some hints of his own. One was to leave out the vowels, and I tried that for a while, but so often I could not make out, after a few days, what I had written, that I gave it up."

"But we could have vowel-points, like Hebrew," cried I, "and accents for all those dreadful little 'preps' that will not submit to be left out! Let's begin now; Madame said my finger was too sore to practice, and to-morrow's a holiday."

By the next evening, with the aid of what Elinor could remember of Mr. Ritchie's book, we had chosen our signs, and written out our "principles." More than that, we had copied them on visiting cards, which we carried in our pockets, with

another to write little sentences on, as practice.

After modifying our plan a little, as we found out its weak points, it really answered our purpose extremely well; for the time saved by it permitted more care in the formation of the letters actually used. My father noticed with pleasure an improvement in my handwriting, "especially as regards legibility," and — I got the Essay Prize. Partly, I believed, because my little card and the "plan" made it possible to put down the right word, or a fresh idea, whenever it occurred to me.

For the benefit of the youthful students who read WIDE AWAKE, I subjoin our principles, a list of letter-signs, and of the arbitrary signs we adopted, and also a specimen copy of a well-known poem by Cowper written in Condensed-Hand.

THE PRINCIPLES OF CONDENSED-HAND.

I. The vowels a, e and i, unless alone, are represented by dots; *a* by one just above the line; *e* by one below, and *i* by one above the writing.

II. Arbitrary signs are used for small words in frequent use; also for sounds, *sh*, *th*, and *wh*.

III. Numerals are used for the sounds they represent; *orn*8, *at*1o*d*, *b*4, 1*ce*. The arithmetical signs -:- and = are also used. The numeral 3 is excepted, being made to stand for "it."

IV. The repetition of a letter or syllable is shown by a line drawn transversely through it.

V. A dash *above* the first letter of a word indicates the prefix "over"; *below*, the prefix "under." A dash above the *last* letter of a word, shows it is followed by "up"; below this letter, by "down."

VI. Each single letter of the alphabet is made to stand for some word in common use, the letter to be, as far as possible, an initial. This list of letters may be made up by the student, so as to include words most apt to occur in his work, but I add the letter-signs used by us as likely to meet general needs:

A	answer.	F	fast.	K	knowledge.
a	after.	f	from.	k	know.
B	beginning.	G	good.	L	language.
b	but.	g	give.	l	all.
C	circumstance.	H	how.	M	more.
c	certain.	h	have.	m	much.
D	day.	I	I.	N	nothing.
d	doing.	i	individual.	n	next.
E	especially.	J	justice.	O	opportunity.
e	each.	j	just.	o	only.
P	present.	s	sure.	W	what.
p	person.	T	translate.	w	we.
Q	question.	t	that.	X	express.
q	quick.	U	understand.	x	except.
R	right.	u	you.	Y	young.
r	are.	V	value.	y	yet.
S	superior.	v	very.	Z	enough.

It will be found best to postpone the consideration of this list until the other steps in the system have become tolerably familiar.

A single letter may often be used for the prefix or suffix, of which it is the initial or terminal.

THE ARBITRARY SIGNS.

(	on.	⁄	the *or* 'th'.	o	round *or* around.
)	or.	1	by.	⁄	'ly.
⌣	no *or* not.	∧	wh. *or* which.	3	it.
⌒	to *or* too.	··	at.	4	for, four, *or* fore.
\	of.	:	she *or* 'sh'.	–	in.

In the following example the vowel-points are all put in, but this is never necessary; as only enough of them need be used to identify the word.

(⁄ LOS × ROY.L G.ORG.

Wr't.n ∧n ⁄ n.ws .r'v.d,

1 WM. COWP.R.

I.

To1 4 ⁄ br.v.—
⁄ br.v. t r ⌣ mor.!
.1 sunk b.n..⁄ ⁄ w.v.,
F.st 1 ⁄'r n.t'v. :or.

II.

800 × br.v.,
∧os. cour.g. w.l w.s tr'.d,
H.d m.d. ⁄ v.s.l h..l,
& l.'d h.r (h.r s'd.

III.

. l.nd br..z. :o k ⁄ :rouds,
& : w.s s̄.t—
Down w.nt ⁄ Roy.l G.org.,
W'⁄ .l h.r cr.w compl.t..

IV.

Tol 4 ⁄ br.v.!
Br.v. K.mp.nf.ldt 's gon.;
H's l.st s.a f'ght 's fought,
H's work \ glory don..

V.

3 w.s ⌣ – ⁄ b.t l.;
⁄ t.mp.st g.v. ⌣ :ock;
: spr.ng ⌣ f.t.l l..k;
: r.n up(⌣ rock.

VI.

H's sword w.s – 3s :..⁄;
H's f'ng.rs h.ld ⁄ p.n,
∧.n K.mp.nf.ldt w.nt
W'⁄ tw'c. 400 m.n.

VII.

W.'gh ⁄ v.s.l,
1ce dr..d 1 our fo.s!
& m'ngl. – ⁄ cup
⁄ t..r t .ngl.nd ow.s.

.

IX.

b K.mp.nf.ldt 's gon.,
H's v'ctor's r o'er;
& h. & h's 800
:.l plough ⁄ s..s ⌣ mor.!

SEARCH-QUESTIONS IN GREEK HISTORY.

By Oscar Fay Adams.

XII.

GREEK LITERATURE — PROSE.

221. Mention one of the earliest Greek prose writers who is said to have introduced the use of the sun-dial into Greece?

222. What writer is called the Father of History?

223. Give the name of the greatest Athenian historian.

224. Who wrote the *Hellenica* and of what is it a continuation?

225. Mention three other works by the author of the *Hellenica*.

226. What celebrated philosopher was born in Athens in the year that Pericles died?

227. Mention two important works by him.

228. Of what great philosopher was he a pupil?

229. State briefly what is the groundwork of his philosophy?

230. What philosopher is sometimes called the Stagirite?

231. What school of philosophy did he found?

232. What philosopher taught that pleasure is the highest good?

233. What Athenian orator is said to have spent ten or fifteen years over one oration?

234. What orator was reckoned second only to Demosthenes?

235. How many orations by Demosthenes are extant?

236. Name a famous Alexandrine mathematician whose works are still studied.

237. What very noted Greek biographer was born at Chæronea?

238. Who wrote the *Description of Greece*, and when did he flourish?

239. What Greek writer living in Rome was the author of a history called *The Historical Library*?

240. Mention a celebrated Greek geographer born in Pontus.

ANSWERS TO SEPTEMBER SEARCH-QUESTIONS.

181. Cronus.

182. Aïcles and Poseidon.

183. Pandora. See Longfellow's *Masque of Pandora*.

184 Hera.

185. Eris. "For the fairest."

186. Pallas-Athene. See *The Life and Death of Jason*, by Wm. Morris.

187. Themis.

188. Persephone. See *Persephone*, by Jean Ingelow.

189. Aphrodite.

190. Helios.

191. Phœbus-Apollo.

192. Selene, who loved Endymion.

193. Atalanta. See *Atalanta's Race*, by Wm. Morris.

194. Iphigenia. See *Iphigenia in Aulis*, by Goethe.

195. Hephæstus.

196. In honor of Poseidon.

197. Glaucus.

198. Thetis, the mother of Achilles.

199. They were sea-nymphs who were supposed to live on the dangerous coasts of South-western Italy.

200. Eros. See *Eros and Psyche*, by Robert Bridges, and *Cupid and Psyche*, by Wm. Morris.